

IMS RbR to L4 traceability (1 of 180)

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-0010#A	The IMS shall be capable of providing 24 hour per day, 7 day per week access to the ECS services.		S-DMS-30100	A	The GTWAY CI shall be available 24 hours a day, 7 days a week within the constraints of the RMA requirements.
			S-IOS-00480	A	The ADSRV CI shall be available 24 hours a day, 7 days a week within the constraints of the RMA requirements.
IMS-0010#B	The IMS shall be capable of providing 24 hour per day, 7 day per week access to the ECS services.		S-DMS-00565	B	The LIMGR CI shall be available 24 hours a day, 7 days a week within the constraints of the RMA requirements.
			S-DMS-20695	B	The DDICT CI shall be available 24 hours a day, 7 days a week within the constraints of the RMA requirements.
			S-DMS-10345	B	The DIMGR CI shall be available 24 hours a day, 7 days a week within the constraints of the RMA requirements.
			S-DMS-30100	A	The GTWAY CI shall be available 24 hours a day, 7 days a week within the constraints of the RMA requirements.
			S-IOS-00480	A	The ADSRV CI shall be available 24 hours a day, 7 days a week within the constraints of the RMA requirements.
IMS-0020#B	The IMS shall always be accessible to users and an informational status message describing the current availability status of ECS services and the predicted time for resumption of services which are temporarily unavailable shall be provided.		S-CLS-13060	B	The WKBCH CI shall provide the user the capability to view the service availability status of all ECS services.
			S-CLS-15770	B	The WKBCH CI shall provide the user the predicted time for resumption of ECS services which are temporarily unavailable.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-0030#A	The IMS shall provide from each ECS access node, access to the full range of services spanning the whole of ECS, including data and services available from all DAACs without requiring that the user know the physical location of the data.	A: LIM capability	S-CLS-10710	A	The WKBCH CI shall provide the registered user the capability to obtain ECS data and services.
			S-CLS-10720	A	Registered users shall be able to obtain ECS data and services via their corresponding interfaces in the WKBCH CI, provided that the users are authorized for the specific services and/or data.
			S-CLS-10910	A	The WKBCH CI shall provide users the capability to transparently search across any combination of Data Servers for stored EOSDIS Data Granules.
			S-CLS-10650	A	The WKBCH CI shall provide the user the capability to identify Data and services provided by ECS.
			S-CLS-10700	A	The WKBCH CI shall provide the user the capability to locate non-ECS data and services interoperable with ECS.
			S-IOS-00010	A	The ADSRV CI shall provide the capability for viewing Advertisements.
			S-IOS-00070	A	The ADSRV CI shall provide capability for displaying Advertisements for data and services provided by non-ECS systems with which ECS is interoperable.
			S-IOS-00080	A	The ADSRV CI shall provide a capability to access Advertisements for ECS and non-ECS data and services.
			S-DSS-00023	A	The SDSRV CI shall perform services specified by Service Requests.
			S-DSS-03040	A	The SDSRV CI shall be capable of receiving Metadata associated with Science Software Archive Packages.
			S-DSS-03250	A	The SDSRV CI shall be capable of receiving QA Statistics.
			S-DSS-03260	A	The SDSRV CI shall be capable of receiving Metadata associated with QA Statistics.
			S-DSS-03440	A	The SDSRV CI shall interface with the STMGT CI to provide storage for Science Software Archive Packages.
			S-DSS-03620	A	The SDSRV CI shall interface with the STMGT CI to provide storage for QA Statistics.
			S-DSS-04060	A	The SDSRV CI shall supply Science Software Archive Packages to the DDIST CI.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-04070	A	The SDSRV CI shall supply Metadata associated with Science Software Archive Packages to the DDIST CI.
			S-DSS-04160	A	The SDSRV CI shall supply inventory characteristic data to the DDIST CI.
			S-DSS-04200	A	The SDSRV CI shall supply Production History data to the DDIST CI.
			S-DSS-04210	A	The SDSRV CI shall supply Metadata associated with Production History data to the DDIST CI.
			S-DSS-04240	A	The SDSRV CI shall supply QA Statistics to the DDIST CI.
			S-DSS-04250	A	The SDSRV CI shall supply Metadata associated with QA Statistics to the DDIST CI.
			S-DSS-10060	A	The DDSRV CI shall provide access to the ECS guide (documentation/reference material) and guide services.
			S-DSS-00020	IR1	The SDSRV CI shall accept Service Requests from clients.
			S-DSS-03170	A	The SDSRV CI shall be capable of receiving validated Inventory Data.
			S-DSS-03450	A	The SDSRV CI shall provide storage for Metadata associated with Science Software Archive Packages.
			S-DSS-03540	A	The SDSRV CI shall provide storage for inventory characteristic data.
			S-DSS-03580	A	The SDSRV CI shall interface with the STMGT CI to provide storage for Production History.
			S-DSS-03630	A	The SDSRV CI shall provide storage for Metadata associated with QA Statistics.
			S-DSS-03210	A	The SDSRV CI shall be capable of receiving Production History and its associated metadata.
IMS-0030#B	The IMS shall provide from each ECS access node, access to the full range of services spanning the whole of ECS, including data and services available from all DAACs without requiring that the user know the physical location of the data.	B: LIM/DIM capability	S-CLS-10710	A	The WKBCH CI shall provide the registered user the capability to obtain ECS data and services.
			S-CLS-10720	A	Registered users shall be able to obtain ECS data and services via their corresponding interfaces in the WKBCH CI, provided that the users are authorized for the specific services and/or data.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-10910	A	The WKBCH CI shall provide users the capability to transparently search across any combination of Data Servers for stored EOSDIS Data Granules.
			S-CLS-10650	A	The WKBCH CI shall provide the user the capability to identify Data and services provided by ECS.
			S-CLS-10700	A	The WKBCH CI shall provide the user the capability to locate non-ECS data and services interoperable with ECS.
			S-IOS-00010	A	The ADSRV CI shall provide the capability for viewing Advertisements.
			S-IOS-00070	A	The ADSRV CI shall provide capability for displaying Advertisements for data and services provided by non-ECS systems with which ECS is interoperable.
			S-IOS-00080	A	The ADSRV CI shall provide a capability to access Advertisements for ECS and non-ECS data and services.
			S-DSS-00023	A	The SDSRV CI shall perform services specified by Service Requests.
			S-DSS-03040	A	The SDSRV CI shall be capable of receiving Metadata associated with Science Software Archive Packages.
			S-DSS-03250	A	The SDSRV CI shall be capable of receiving QA Statistics.
			S-DSS-03260	A	The SDSRV CI shall be capable of receiving Metadata associated with QA Statistics.
			S-DSS-03440	A	The SDSRV CI shall interface with the STMGT CI to provide storage for Science Software Archive Packages.
			S-DSS-03620	A	The SDSRV CI shall interface with the STMGT CI to provide storage for QA Statistics.
			S-DSS-04060	A	The SDSRV CI shall supply Science Software Archive Packages to the DDIST CI.
			S-DSS-04070	A	The SDSRV CI shall supply Metadata associated with Science Software Archive Packages to the DDIST CI.
			S-DSS-04160	A	The SDSRV CI shall supply inventory characteristic data to the DDIST CI.
			S-DSS-04200	A	The SDSRV CI shall supply Production History data to the DDIST CI.
			S-DSS-04210	A	The SDSRV CI shall supply Metadata associated with Production History data to the DDIST CI.
			S-DSS-04240	A	The SDSRV CI shall supply QA Statistics to the DDIST CI.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-04250	A	The SDSRV CI shall supply Metadata associated with QA Statistics to the DDIST CI.
			S-DSS-10060	A	The DDSRV CI shall provide access to the ECS guide (documentation/reference material) and guide services.
			S-DMS-00010	B	The LIMGR CI shall provide capabilities to search and obtain data by science discipline.
			S-DMS-00750	B	The LIMGR CI shall have the capability of creating, editing and deleting advertisements about itself and submitting them to the Advertising Service.
			S-DMS-10010	B	The DIMGR CI shall provide capabilities to search and obtain data across DAACs.
			S-DSS-01790	B	The SDSRV CI shall provide access to compound data type services.
			S-DSS-04180	B	The SDSRV CI shall supply Orbit/Attitude Data to the DDIST CI.
			S-DSS-04190	B	The SDSRV CI's MD Component shall supply Metadata associated with Orbit/Attitude Data to the DDIST CI.
			S-DSS-00020	IR1	The SDSRV CI shall accept Service Requests from clients.
			S-DSS-03170	A	The SDSRV CI shall be capable of receiving validated Inventory Data.
			S-DSS-03450	A	The SDSRV CI shall provide storage for Metadata associated with Science Software Archive Packages.
			S-DSS-03540	A	The SDSRV CI shall provide storage for inventory characteristic data.
			S-DSS-03580	A	The SDSRV CI shall interface with the STMGT CI to provide storage for Production History.
			S-DSS-03630	A	The SDSRV CI shall provide storage for Metadata associated with QA Statistics.
			S-DSS-03210	A	The SDSRV CI shall be capable of receiving Production History and its associated metadata.
IMS-0040#A	The IMS shall verify user authorization by validation of inputs with information as supplied by the SMC.		S-CLS-13370	A	The WKBCH CI shall provide users an interface for user authentication.
			S-CLS-13410	A	The WKBCH CI shall display the results of user validation to the user. 4.1.2.3 User Sessions

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-0040#B	The IMS shall verify user authorization by validation of inputs with information as supplied by the SMC.		S-CLS-13370	A	The WKBCH CI shall provide users an interface for user authentication.
			S-CLS-13410	A	The WKBCH CI shall display the results of user validation to the user. 4.1.2.3 User Sessions
			C-MSS-75130	B	The Accountability Service shall have the capability to send user registration information to the CLS.
			S-CLS-13380	B	The WKBCH CI shall send User Authentication Requests to the SMC.
			S-CLS-13400	B	The WKBCH CI shall obtain user authentication information from the user.
			S-CLS-13390	B	The WKBCH CI shall allow or deny the user system access based on User Validation Status returned from the SMC.
IMS-0050#A	The IMS shall provide the capability for users to define and modify user profile information, to include at a minimum: a. User electronic address b. Data distribution media c. Data distribution address d. User expertise level e. Default query parameters f. Terminal characteristics g. Technical specialty.		S-CLS-12510	A	The WKBCH CI shall provide the user a capability to view their User Profile.
			S-CLS-12520	A	The WKBCH CI shall provide the capability for a user to modify their User Profile information.
			S-CLS-13450	A	Where the User Profile specifies defaults for parameters which are applicable to an ECS Service Request, the user interface shall employ these defaults to assist the user in the formulation of a new request (e.g., by displaying them as default values).
IMS-0050#B	The IMS shall provide the capability for users to define and modify user profile information, to include at a minimum: a. User electronic address b. Data distribution media c. Data distribution address d. User expertise level e. Default query parameters f. Terminal characteristics g. Technical specialty.		S-CLS-12510	A	The WKBCH CI shall provide the user a capability to view their User Profile.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-12520	A	The WKBCH CI shall provide the capability for a user to modify their User Profile information.
			S-CLS-13450	A	Where the User Profile specifies defaults for parameters which are applicable to an ECS Service Request, the user interface shall employ these defaults to assist the user in the formulation of a new request (e.g., by displaying them as default values).
			S-CLS-13460	B	The WKBCH CI shall provide users the capability to create a Session Profile for each user session. The Session Profile shall be able to contain any of the parameters which are in the User Profile and which may apply as defaults to ECS Service Requests.
			S-CLS-13470	B	The user interface shall employ the defaults specified in the Session Profile to assist the user in the formulation of a new request in the context of a user session (e.g., by displaying them as default values in the respective input fields).
			S-CLS-15900	B	The WKBCH CI shall support multiple addresses for product requests, which include mailing address, billing address and shipping address.
IMS-0060#A	The IMS shall, when creating ECS user accounts, request registration approval, user account priorities, and authorized user services from the SMC.		S-CLS-13100	A	The WKBCH CI shall provide the user with registration approval results when new ECS user accounts are requested.
IMS-0060#B	The IMS shall, when creating ECS user accounts, request registration approval, user account priorities, and authorized user services from the SMC.		S-CLS-13100	A	The WKBCH CI shall provide the user with registration approval results when new ECS user accounts are requested.
			S-CLS-13110	A	The WKBCH CI shall provide registered users with the capability to view their user account priorities, and authorized user services.
			S-CLS-13420	A	The WKBCH CI shall provide a User Registration Request to create a new ECS user account.
			S-CLS-13090	B	The WKBCH CI shall perform registration of new users from user supplied and default information.
IMS-0070#A	The IMS shall provide the user with initial system access procedures, priority information, and authorized services as maintained in the SMC.		S-CLS-13130	A	The WKBCH CI shall provide users Priority Information.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-13440	A	The WKBCH CI shall provide registered users access to ECS services based on their account priorities and authorized user services.
			S-CLS-13120	A	The WKBCH CI shall provide users with initial system access procedures.
IMS-0070#B	The IMS shall provide the user with initial system access procedures, priority information, and authorized services as maintained in the SMC.		S-CLS-13130	A	The WKBCH CI shall provide users Priority Information.
			S-CLS-13440	A	The WKBCH CI shall provide registered users access to ECS services based on their account priorities and authorized user services.
			S-CLS-13120	A	The WKBCH CI shall provide users with initial system access procedures.
			S-CLS-13115	B	The WKBCH CI shall provide registered users with the capability to request changes to their user account priorities and authorized user services.
IMS-0080#A	The IMS shall maintain a list of authorized ECS services for each user and shall update the list with information supplied by the SMC.		C-CSS-21120	A	The CSS Security service shall provide an API to check the authorization privileges of principals to access/control services/resources.
			C-CSS-21130	A	The CSS Security Service shall provide an API to define the permission schema associated with a server/resource.
			C-CSS-21140	A	The CSS Security Service shall provide an API to create and maintain the ACLs associated with the server/resource in a database.
			C-CSS-21150	A	The CSS Security Service shall provide an API to save/retrieve the ACL database onto persistent store.
IMS-0080#B	The IMS shall maintain a list of authorized ECS services for each user and shall update the list with information supplied by the SMC.		C-CSS-21120	A	The CSS Security service shall provide an API to check the authorization privileges of principals to access/control services/resources.
			C-CSS-21130	A	The CSS Security Service shall provide an API to define the permission schema associated with a server/resource.
			C-CSS-21140	A	The CSS Security Service shall provide an API to create and maintain the ACLs associated with the server/resource in a database.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-CSS-21150	A	The CSS Security Service shall provide an API to save/retrieve the ACL database onto persistent store.
			C-MSS-75140	B	The Accountability Service shall have the capability to send user profile information to the CLS.
IMS-0085#A	The IMS shall provide unregistered users access to ECS services as authorized by the SMC.		S-CLS-10670	A	The WKBCH CI shall provide unregistered users the capability to browse public Advertisements.
IMS-0085#B	The IMS shall provide unregistered users access to ECS services as authorized by the SMC.		S-CLS-10670	A	The WKBCH CI shall provide unregistered users the capability to browse public Advertisements.
IMS-0090#A	The IMS shall be accessible to users via, at a minimum: a. Direct connection c. Network link		S-CLS-15710	A	The WKBCH CI shall provide users access to ECS services via a network link.
IMS-0090#B	The IMS shall be accessible to users via, at a minimum: a. Direct connection b. Dial up connection c. Network link		S-CLS-15710	A	The WKBCH CI shall provide users access to ECS services via a network link.
			S-CLS-15720	B	The WKBCH CI shall provide users access to ECS services via a direct connection.
			S-CLS-15790	B	The WKBCH CI shall provide users access to ECS services via dialup link.
IMS-0100#A	The IMS shall support, at a minimum: a. Interactive sessions b. Non-interactive remote sessions c. Client-server interface		S-CLS-01510	A	The WKBCH CI interface to access communications networks shall conform to the ECS style guidelines.
IMS-0100#B	The IMS shall support, at a minimum: a. Interactive sessions b. Non-interactive remote sessions c. Client-server interface d. Simulated sessions for training purposes		S-CLS-01600	A	The DESKT CI shall provide users the capability to resize windows.
			S-CLS-01605	A	The DESKT CI shall provide users the capability to select different default screen font sizes.
			S-CLS-01610	A	The DESKT CI shall provider users with the ability to change the default icon size.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-01620	A	The DESKTI CI shall provide users the ability to change the spacing of icons.
			S-CLS-01510	A	The WKBCI CI interface to access communications networks shall conform to the ECS style guidelines.
			S-CLS-10630	B	The system shall provide users a Training Option
			S-CLS-10640	B	The Training option shall consist of simulated user sessions for identifying, searching for and obtaining data and services.
			S-CLS-12110	B	The WKBCI CI shall provide a GUI interface with a command language.
			S-CLS-12500	B	The WKBCI CI shall provide users an interface to APIs for use in non-interactive remote user sessions.
			S-CLS-12570	B	The WKBCI CI shall provide users interactive user sessions.
			S-CLS-12860	B	The WKBCI CI shall provide a dumb terminal interface with a command language.
			S-CLS-13220	B	The WKBCI CI shall provide users the capability to issue Service Requests within the context of a user session.
			S-DMS-30800	B	The GTWAY CI shall be able to provide notification of events associated with sessions which require additional instructions, e.g., when requests exceed a specified threshold.
			S-DMS-30805	B	The GTWAY CI shall be able to provide notification of events associated with Service requests which require additional instructions, e.g., when resources for a request exceed a specified threshold.
			S-DMS-30810	B	The GTWAY CI shall provide an entry point to be used to respond to notifications of events which require instructions to be returned to the LIM CI.
			S-DMS-30820	B	The GTWAY CI shall provide the capability to accept and utilize the entry point to be used for asynchronous notification in asynchronous Service Requests.
			S-DMS-30830	B	The GTWAY CI shall provide the capability to disable asynchronous notifications, and provide default instructions for such notification events.
IMS-0110#A	The IMS user interface shall support access from dumb terminals, both local and remote, as well as bitmap display workstations that do not support the IMS toolkit.	A: ChUI, teletype, and dumb terminal	S-CLS-13300	A	The WKBCI CI shall provide users the capability to access text information as plain text documents for dumb terminals.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-13265	A	The WKBCH CI Subsystem shall provide ChUI terminal support conforming to VT-100 standards.
IMS-0110#B	The IMS user interface shall support access from dumb terminals, both local and remote, as well as bitmap display workstations that do not support the IMS toolkit.		S-CLS-12870	B	The WKBCH CI shall support a dumb terminal interface that provides users system access from local and remote dumb terminals.
			S-CLS-13300	A	The WKBCH CI shall provide users the capability to access text information as plain text documents for dumb terminals.
			S-CLS-13265	A	The WKBCH CI Subsystem shall provide ChUI terminal support conforming to VT-100 standards.
IMS-0120#A	The IMS shall provide, dependent upon the user's display device capabilities, a user-friendly interface with the following features at a minimum: a. Multiple window display b. Buttons and pull down menus c. Valid lists for all variables d. An information base of associations between variables (e.g., between instruments and geophysical parameters) f. Context-sensitive help g. Minimal and consistent use of non-standard keys h. Random movement through fields j. Standardized use of commands and terminology across screens k. Self-explanatory, meaningful error messages l. Automatic acronym expansion, which can be enabled and disabled interactively m. Availability of a menu tree diagram n. Command language	A: VALID LISTS FOR VARIABLES FOR ASTER PRODUCTS NOT AVAILABLE	S-CLS-00010	A	The DESKT CI shall provide a GUI interface with a multiple window display.
			S-CLS-00020	A	The DESKT CI shall provide a GUI interface with buttons and pull down menus.
			S-CLS-00030	A	The DESKT CI shall provide a GUI interface with consistent use of non-standard keys.
			S-CLS-00040	A	The DESKT CI shall provide a GUI interface with minimal use of non-standard keys.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-00050	A	The DESKT CI shall provide a GUI interface with standardized use of commands and terminology across screens.
			S-CLS-00090	A	The DESKT CI shall provide a GUI interface with random movement of a cursor through the screen.
			S-CLS-00100	A	The DESKT CI shall provide a GUI interface with context-sensitive help.
			S-CLS-00110	A	The help information made available to a user shall include a general introductory description of EOSDIS and its services.
			S-CLS-00120	A	The DESKT CI shall provide for a common default color scheme for the user interface which may be customized by the user.
			S-CLS-00130	A	The DESKT CI shall provide for a standard ordering of menu items for the user interface.
			S-CLS-00140	A	The DESKT CI shall provide a standard widget set for building a user interface.
			S-CLS-12520	A	The WKBCH CI shall provide the capability for a user to modify their User Profile information.
			S-CLS-14020	A	The WKBCH CI shall list Dependent Valid Values associated with search screens to show current Valid Values, as the parameterization of the search is changed.
			S-CLS-13270	A	The WKBCH CI shall provide a GUI interface with Valid Value lists for all variables.
			S-CLS-13260	A	The WKBCH CI shall provide a dumb terminal interface with Valid Value lists for all attributes.
			S-CLS-14560	A	The WKBCH CI shall provide access to the lists of the Valid Values for data elements, where the data element has an enumerated set of values as a constraint.
			S-CLS-15690	A	The DESKT CI shall utilize the Motif widget set for providing GUI interfaces.
			S-CLS-00080	A	The DESKT CI shall provide a GUI interface with self-explanatory error messages.
			S-CLS-01280	A	The WKBCH CI shall provide a GUI interface to data dictionary associations between attributes (e.g., between instruments and geophysical parameters).

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-0120#B	The IMS shall provide, dependent upon the user's display device capabilities, a user-friendly interface with the following features at a minimum: a. Multiple window display b. Buttons and pull down menus c. Valid lists for all variables d. An information base of associations between variables (e.g., between instruments and geophysical parameters) e. Ability to restore a session after interruption f. Context-sensitive help g. Minimal and consistent use of non-standard keys h. Random movement through fields i. Capability to save and restore the contents of a menu or form j. Standardized use of commands and terminology across screens k. Self-explanatory, meaningful error messages l. Automatic acronym expansion, which can be enabled and disabled interactively m. Availability of a menu tree diagram n. Command language	B: VALID LISTS FOR VARIABLES FOR ASTER PRODUCTS BECOME AVAILABLE	S-CLS-00010	A	The DESKT CI shall provide a GUI interface with a multiple window display.
			S-CLS-00020	A	The DESKT CI shall provide a GUI interface with buttons and pull down menus.
			S-CLS-00030	A	The DESKT CI shall provide a GUI interface with consistent use of non-standard keys.
			S-CLS-00040	A	The DESKT CI shall provide a GUI interface with minimal use of non-standard keys.
			S-CLS-00050	A	The DESKT CI shall provide a GUI interface with standardized use of commands and terminology across screens.
			S-CLS-00090	A	The DESKT CI shall provide a GUI interface with random movement of a cursor through the screen.
			S-CLS-00100	A	The DESKT CI shall provide a GUI interface with context-sensitive help.
			S-CLS-00110	A	The help information made available to a user shall include a general introductory description of EOSDIS and its services.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-00120	A	The DESKT CI shall provide for a common default color scheme for the user interface which may be customized by the user.
			S-CLS-00130	A	The DESKT CI shall provide for a standard ordering of menu items for the user interface.
			S-CLS-00140	A	The DESKT CI shall provide a standard widget set for building a user interface.
			S-CLS-12520	A	The WKBCH CI shall provide the capability for a user to modify their User Profile information.
			S-CLS-14020	A	The WKBCH CI shall list Dependent Valid Values associated with search screens to show current Valid Values, as the parameterization of the search is changed.
			S-CLS-13270	A	The WKBCH CI shall provide a GUI interface with Valid Value lists for all variables.
			S-CLS-13260	A	The WKBCH CI shall provide a dumb terminal interface with Valid Value lists for all attributes.
			S-CLS-14560	A	The WKBCH CI shall provide access to the lists of the Valid Values for data elements, where the data element has an enumerated set of values as a constraint.
			S-CLS-15690	A	The DESKT CI shall utilize the Motif widget set for providing GUI interfaces.
			C-CSS-65230	B	The CSS Secure Web service shall support the browser used by the Client subsystem.
			S-CLS-00150	B	The DESKT CI shall provide container desktop objects.
			S-CLS-00160	B	The DESKT CI shall provide document desktop objects.
			S-CLS-00170	B	The DESKT CI shall provide application desktop objects.
			S-CLS-00180	B	The DESKT CI shall provide users the capability to execute software associated with a desktop object.
			S-CLS-00190	B	The DESKT CI shall provide users the capability to create desktop objects.
			S-CLS-00200	B	The DESKT CI shall provide users the capability to destroy desktop objects.
			S-CLS-00210	B	The DESKT CI shall provide users the capability to open desktop objects.
			S-CLS-00220	B	The DESKT CI shall provide users the capability to copy the reference to objects for a desktop object.
			S-CLS-00230	B	The DESKT CI shall provide users the capability to copy a desktop object.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-00240	B	The DESKT CI shall provide users the capability to deep copy a desktop object.
			S-CLS-00250	B	The DESKT CI shall provide users the capability to move desktop objects.
			S-CLS-00260	B	The DESKT CI shall provide users the capability to obtain desktop object data associated with desktop objects.
			S-CLS-00270	B	The DESKT CI shall provide users the capability to update desktop object data associated with desktop objects.
			S-CLS-00280	B	The DESKT CI shall provide users the capability to list the available services associated with any desktop object.
			S-CLS-00290	B	The DESKT CI shall provide users the capability to bind a service to a desktop object.
			S-CLS-00295	B	The DESKT CI shall provide users the capability to unbind a service from a desktop object.
			S-CLS-00300	B	The DESKT CI shall provide users the capability to invoke any service bound to a desktop object.
			S-CLS-00310	B	The DESKT CI shall provide users the capability to generate an exchangeable (i.e., file based) form for desktop objects.
			S-CLS-00320	B	The DESKT CI shall provide users the capability to generate a desktop object from an externalized (i.e., file-based) format.
			S-CLS-00330	B	The DESKT CI shall provide users the capability to add desktop objects to container objects.
			S-CLS-00340	B	The DESKT CI shall provide users the capability to remove desktop objects from container objects.
			S-CLS-00350	B	The DESKT CI shall provide users the capability to iteratively apply operations to each of the objects in a desktop container.
			S-CLS-00380	B	The DESKT CI shall provide users the capability to display on a continuous basis the objects contained in container objects.
			S-CLS-00390	B	The DESKT CI shall provide the capability to iconically represent desktop objects.
			S-CLS-00400	B	The DESKT CI shall provide the capability to textually represent desktop objects.
			S-CLS-00410	B	The DESKT CI shall provide the users the capability to list object types supported by a specific application or service class.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-00420	B	The DESKT CI shall provide the users the capability to list applications or service classes supported by a specific object type.
			S-CLS-00430	B	The DESKT CI shall provide the users the capability to add applications or services supported by a specific object type.
			S-CLS-00440	B	The DESKT CI shall provide the users the capability to remove applications or services supported by a specific object type.
			S-CLS-00450	B	The DESKT CI shall provide users the capability to install an application interface (i.e., an application and its parameterized interface description).
			S-CLS-00460	B	The DESKT CI shall provide users the capability to remove an application interface.
			S-CLS-00470	B	The DESKT CI shall provide users the capability to obtain the attributes associated with an application interface.
			S-CLS-00490	B	The DESKT CI shall provide users the capability to modify the attributes associated with an application interface.
			S-CLS-00640	B	The DESKT CI shall provide users the capability to obtain a description of the interaction between the Workbench and specified tools.
			S-CLS-01450	B	Desktop objects shall utilize a <TBD> external format.
			S-CLS-01460	B	Desktop object references shall be in <TBD> format.
			S-CLS-01500	B	The DESKT CI user interface shall conform to the guidelines in Version 4.0 of the ECS User Interface Style Guide (June 1, 1994).
			S-CLS-01550	B	The DESKT CI shall provide the user the capability to copy ECS services onto his desktop, iconize them, and save them as desktop objects.
			S-CLS-01555	B	The DESKT CI shall have capability to prompt user for confirmation when a user attempts addition, modification or deletion of an object.
			S-CLS-01560	B	The DESKT CI shall provide the user the capability to access a service via the previously saved desktop object representing that service.
			S-CLS-12070	B	The WKBCH CI shall provide a GUI interface with capability to save and restore the contents of data search and order forms.
			S-CLS-12110	B	The WKBCH CI shall provide a GUI interface with a command language.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-12720	B	The WKBCH CI shall provide users the capability to rebuild a user session context.
			S-CLS-12810	B	The WKBCH CI shall provide a dumb terminal interface with minimal and consistent use of non-standard keys.
			S-CLS-12820	B	The WKBCH CI shall provide a dumb terminal interface with capability to save and restore the contents of a menu or form.
			S-CLS-12830	B	The WKBCH CI shall provide a dumb terminal interface with standardized use of commands and terminology across screens.
			S-CLS-12840	B	The WKBCH CI shall provide a dumb terminal interface with self-explanatory, meaningful error messages.
			S-CLS-12850	B	The WKBCH CI shall provide a dumb terminal interface with availability of a menu tree diagram.
			S-CLS-12860	B	The WKBCH CI shall provide a dumb terminal interface with a command language.
			S-CLS-12870	B	The WKBCH CI shall support a dumb terminal interface that provides users system access from local and remote dumb terminals.
			S-CLS-13240	B	The WKBCH CI shall provide users the capability to individually suspend and restore the Service Requests within a user session after interruption.
			S-CLS-13680	B	The WKBCH CI shall allow users to access the Data Dictionary Service.
			S-CLS-13830	B	The WKBCH CI shall make ASTER data acquisition schedules and plans accessible to authorized users on request.
			S-CLS-14000	B	The WKBCH CI shall provide a user interface that indicates changes in status of an iconified window (e.g., additional results inserted into window).
			S-CLS-14010	B	The WKBCH CI shall prompt the user to save his/her edits when the user quits the editing of workbench objects (e.g., a Result Set or a Guide document), if there are any unsaved edits.
			S-CLS-14440	B	The WKBCH CI shall provide users the capability to retrieve any previously saved DAR parameters into a new DAR, edit the parameters, save the modified parameters, and/or submit the new DAR.
			S-CLS-14520	B	For WKBCH CI screens requiring user input, optional fields shall be distinguished from mandatory fields.
			S-CLS-15810	B	The DESKT CI shall provide a menu tree diagram

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-15910	B	The DESKT CI shall have the capability to prompt the user for confirmation when a user attempts addition, modification or deletion of an object.
			S-DMS-01000	B	The LIMGR CI shall provide the capability to restore a session after interruption.
			S-DMS-11000	B	The DIMGR CI shall provide the capability to restore a session after interruption.
			S-DMS-20910	B	The DDICT CI shall provide access to the lists of the Valid Values for data elements, where the data element has an enumerated set of values as a constraint
			S-DMS-31000	B	The GTWAY CI shall provide the capability to restore a session after interruption.
			S-CLS-00080	A	The DESKT CI shall provide a GUI interface with self-explanatory error messages.
			S-CLS-01280	A	The WKBCH CI shall provide a GUI interface to data dictionary associations between attributes (e.g., between instruments and geophysical parameters).
			S-CLS-01480	A	The DESKT CI shall utilize an X-windows windowing interface for the GUI.
IMS-0130#A	The IMS shall verify that a user is authorized to access a particular IMS service before providing the service to the user.		S-CLS-13440	A	The WKBCH CI shall provide registered users access to ECS services based on their account priorities and authorized user services.
IMS-0130#B	The IMS shall verify that a user is authorized to access a particular IMS service before providing the service to the user.		S-CLS-13440	A	The WKBCH CI shall provide registered users access to ECS services based on their account priorities and authorized user services.
			S-CLS-13380	B	The WKBCH CI shall send User Authentication Requests to the SMC.
			S-CLS-15760	B	The WKBCH CI shall restrict users' access to data and services for which the users lack sufficient privileges.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-0140#B	The IMS shall provide the capability for multiple simultaneous sessions – for example, the capability to transition back and forth smoothly between directory search, inventory search, and data visualization. For example, when viewing a directory entry, the user shall have easy access to the corresponding guide (documentation/reference material) and inventory information.		S-CLS-00790	B	The DESKTI CI shall provide users the capability to transition from the user session currently active on the desktop to another user session, by means of a single mouse click.
			S-CLS-12540	B	The WKBCI CI shall support multiple concurrent user sessions.
			S-CLS-12550	B	The WKBCI CI shall support multiple concurrent Service Requests.
			S-CLS-12580	B	The WKBCI CI shall provide a user session management capability to transition between user sessions.
			S-CLS-13160	B	The WKBCI CI shall provide users the capability to terminate user sessions with service providers.
			S-CLS-13170	B	The WKBCI CI shall provide users the capability to initiate user sessions with service providers.
			S-CLS-13200	B	The WKBCI CI shall provide users the capability to obtain the status information about user sessions with service providers.
			S-CLS-13210	B	The WKBCI CI shall provide users the capability to connect to an existing user session.
			S-CLS-13220	B	The WKBCI CI shall provide users the capability to issue Service Requests within the context of a user session.
			S-CLS-13460	B	The WKBCI CI shall provide users the capability to create a Session Profile for each user session. The Session Profile shall be able to contain any of the parameters which are in the User Profile and which may apply as defaults to ECS Service Requests.
			S-DMS-00860	B	The LIMGR CI shall provide a capability to report the status of sessions established by it.
			S-DMS-00890	B	The LIMGR CI shall support multiple concurrent sessions.
			S-DMS-00895	B	The LIMGR CI shall support multiple service requests within a session.
			S-DMS-00915	B	The LIMGR CI shall log the initiation of a session.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-00920	B	The LIMGR CI shall log the termination of a session.
			S-DMS-00930	B	The LIMGR CI shall log the suspension of a session.
			S-DMS-00940	B	The LIMGR CI shall log the resumption of previously suspended sessions.
			S-DMS-00960	B	The LIMGR CI shall provide the capability for the operations staff to suspend all active sessions.
			S-DMS-00970	B	The LIMGR CI shall provide the capability for the operations staff to resume any or all sessions, previously suspended by operations staff or clients.
			S-DMS-00980	B	The LIMGR CI shall provide the capability for the operations staff to terminate any or all active or suspended sessions.
			S-DMS-00990	B	The LIMGR CI shall send Notifications to users via email in the event that a users's request or session is canceled by operations staff.
			S-DMS-10860	B	The DIMGR CI shall provide a capability to report the status of sessions established by it.
			S-DMS-10890	B	The DIMGR CI shall support multiple concurrent sessions.
			S-DMS-10895	B	The DIMGR CI shall support multiple service requests within a session.
			S-DMS-10915	B	The DIMGR CI shall log the initiation of a session.
			S-DMS-10920	B	The DIMGR CI shall log the termination of a session.
			S-DMS-10930	B	The DIMGR CI shall log the suspension of a session.
			S-DMS-10940	B	The DIMGR CI shall log the resumption of previously suspended sessions.
			S-DMS-10960	B	The DIMGR CI shall provide the capability for the operations staff to suspend all active sessions.
			S-DMS-10970	B	The DIMGR CI shall provide the capability for the operations staff to resume any or all sessions, previously suspended by operations staff or clients.
			S-DMS-10980	B	The DIMGR CI shall provide the capability for the operations staff to terminate any or all active or suspended sessions.
			S-DMS-10990	B	The DIMGR CI shall send Notifications to users via email in the event that a users's request or session is canceled by operations staff.
			S-DMS-30800	B	The GTWAY CI shall be able to provide notification of events associated with sessions which require additional instructions, e.g., when requests exceed a specified threshold.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-30805	B	The GTWAY CI shall be able to provide notification of events associated with Service requests which require additional instructions, e.g., when resources for a request exceed a specified threshold.
			S-DMS-30810	B	The GTWAY CI shall provide an entry point to be used to respond to notifications of events which require instructions to be returned to the LIM CI.
			S-DMS-30820	B	The GTWAY CI shall provide the capability to accept and utilize the entry point to be used for asynchronous notification in asynchronous Service Requests.
			S-DMS-30830	B	The GTWAY CI shall provide the capability to disable asynchronous notifications, and provide default instructions for such notification events.
			S-DMS-30840	B	The GTWAY CI shall be able to accept notifications of events associated with sessions it has with other services.
			S-DMS-30845	B	The GTWAY CI shall be able to accept notifications of events associated with Service requests it issued to other services.
			S-DMS-30850	B	The GTWAY CI shall provide a capability to accept instructions associated with responses to notifications of events.
			S-DMS-30860	B	The GTWAY CI shall provide a capability to report the status of sessions established by it.
			S-DMS-30870	B	The GTWAY CI shall automatically suspend sessions that have been inactive for a specified time.
			S-DMS-30890	B	The GTWAY CI shall support multiple concurrent sessions.
			S-DMS-30900	B	The GTWAY CI shall support multiple service requests within a session.
			S-DMS-30910	B	The GTWAY CI shall log the initiation of a session.
			S-DMS-30920	B	The GTWAY CI shall log the termination of a session.
			S-DMS-30930	B	The GTWAY CI shall log the suspension of a session.
			S-DMS-30940	B	The GTWAY CI shall log the resumption of previously suspended
			S-DMS-30950	B	The GTWAY CI shall provide the capability for the operations staff to specify a "time-out" period for inactive sessions.
			S-DMS-30960	B	The GTWAY CI shall provide the capability for the operations staff to suspend all active sessions.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-30970	B	The GTWAY CI shall provide the capability for the operations staff to resume any or all sessions, previously suspended by operations staff or clients.
			S-DMS-30980	B	The GTWAY CI shall provide the capability for the operations staff to terminate any or all active or suspended sessions.
			S-DMS-30990	B	The GTWAY CI shall send Notifications to users via email in the event that a users's request or session is canceled by operations staff.
			S-DSS-01220	B	The SDSRV CI shall provide the capability for a client to suspend processing of a client session.
			S-DSS-01290	B	The SDSRV CI shall provide the capability for the operations staff to suspend all active client sessions.
			S-DSS-01300	B	The SDSRV CI shall provide the capability for the operations staff to resume any or all client sessions, previously suspended by operations staff or clients.
			S-DSS-01310	B	The SDSRV CI shall provide the capability for the client to resume a client session, previously suspended by the client.
			S-DSS-01320	B	The SDSRV CI shall provide the capability for the operations staff to terminate any or all active or suspended client sessions.
			S-DSS-01330	B	The SDSRV CI shall provide the capability for the client to terminate any or all active or suspended client sessions that were previously initiated by the client.
			S-DSS-01410	B	The SDSRV CI shall log the suspension of the processing of a Service Request or the suspension of a client session.
			S-DSS-01420	B	The SDSRV CI shall log the resumption of a previously suspended Service Request or client session.
			S-DSS-04740	B	The SDSRV CI shall provide DAR status to the client, in response to DAR Status Requests.
			S-DSS-04770	B	The SDSRV CI shall send DAR Status Requests to ASTER ICC.
			S-DSS-01400	IR1	The SDSRV CI shall log the termination of the processing of a Service Request.
			S-DSS-01405	IR1	The SDSRV CI shall log the termination of client session.
			S-DSS-01430	IR1	The SDSRV CI shall log the initiation of the processing of a Service Request.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-0150#A	The IMS shall supply a uniform user interface for access to the following at a minimum: a. Heterogeneous data sets b. Communications networks c. Data bases that are geographically dispersed d. Multi-disciplined directories and inventories	A: c - within the capability of the LIM	S-CLS-01530	A	The WKBCH CI interface to access to multi-disciplined directories and inventories shall conform to the ECS style guidelines.
			S-CLS-01540	A	The WKBCH CI interface to heterogeneous data sets shall conform to the ECS style guidelines.
			S-CLS-01510	A	The WKBCH CI interface to access communications networks shall conform to the ECS style guidelines.
			S-CLS-15690	A	The DESKT CI shall utilize the Motif widget set for providing GUI interfaces.
			S-CLS-01520	A	The WKBCH CI interface access to data bases that may be geographically dispersed shall conform to the ECS style guidelines.
IMS-0150#B	The IMS shall supply a uniform user interface for access to the following at a minimum: a. Heterogeneous data sets b. Communications networks c. Data bases that are geographically dispersed d. Multi-disciplined directories and inventories		S-CLS-01530	A	The WKBCH CI interface to access to multi-disciplined directories and inventories shall conform to the ECS style guidelines.
			S-CLS-01540	A	The WKBCH CI interface to heterogeneous data sets shall conform to the ECS style guidelines.
			S-CLS-01510	A	The WKBCH CI interface to access communications networks shall conform to the ECS style guidelines.
			S-CLS-15690	A	The DESKT CI shall utilize the Motif widget set for providing GUI interfaces.
			S-CLS-01500	B	The DESKT CI user interface shall conform to the guidelines in Version 4.0 of the ECS User Interface Style Guide (June 1, 1994).
			S-DMS-20360	B	The DDICT CI shall provide documents conforming to HTML3 standards.
			S-CLS-01520	A	The WKBCH CI interface access to data bases that may be geographically dispersed shall conform to the ECS style guidelines.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-01480	A	The DESKT CI shall utilize an X-windows windowing interface for the GUI.
IMS-0160#B	The IMS shall provide levels of user interaction support to include at a minimum: a. Expert (e.g., quick command driven direct information input) b. Intermediate (e.g., some prompting and automatically supplied help) c. Novice (e.g., extensive prompting and help facilities)		S-CLS-12970	B	The Novice level of interaction shall provide prompting and automatic help facilities for user initiated actions.
			S-CLS-12960	B	The WKBCH CI shall provide a Novice level of user interaction.
			S-CLS-12920	B	The WKBCH CI shall provide an option for Expert level of user interaction.
			S-CLS-12930	B	The Expert level of interaction shall provide direct information input with no automatically supplied help.
			S-CLS-12940	B	The WKBCH CI shall provide an option for Intermediate level of user interaction.
			S-CLS-12950	B	The Intermediate level of interaction shall provide prompting and automatically supplied help.
IMS-0170#A	The IMS user interface shall be designed so that restructuring of the IMS data bases shall not result in the need for changes to the IMS interface.		S-CLS-12910	A	The user interface shall not require changes as a result of restructuring any of the data bases provided by the SDSRV CI.
			S-CLS-12980	A	The user interface shall not require changes as a result of restructuring any of the data bases provided by the DDICT CI.
			S-CLS-12990	A	The user interface shall not require changes as a result of restructuring any of the data bases provided by the ADSRV CI.
IMS-0170#B	The IMS user interface shall be designed so that restructuring of the IMS data bases shall not result in the need for changes to the IMS interface.		S-CLS-12910	A	The user interface shall not require changes as a result of restructuring any of the data bases provided by the SDSRV CI.
			S-CLS-12980	A	The user interface shall not require changes as a result of restructuring any of the data bases provided by the DDICT CI.
			S-CLS-12990	A	The user interface shall not require changes as a result of restructuring any of the data bases provided by the ADSRV CI.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-0180#A	The IMS shall extract relevant data from the user profile information and display as default values.		S-CLS-13450	A	Where the User Profile specifies defaults for parameters which are applicable to an ECS Service Request, the user interface shall employ these defaults to assist the user in the formulation of a new request (e.g., by displaying them as default values).
IMS-0180#B	The IMS shall extract relevant data from the user profile information and display as default values.		S-CLS-13450	A	Where the User Profile specifies defaults for parameters which are applicable to an ECS Service Request, the user interface shall employ these defaults to assist the user in the formulation of a new request (e.g., by displaying them as default values).
			S-CLS-13470	B	The user interface shall employ the defaults specified in the Session Profile to assist the user in the formulation of a new request in the context of a user session (e.g., by displaying them as default values in the respective input fields).
IMS-0190#A	The IMS shall provide the capability to save information selected in prior metadata searches for use in subsequent IMS service requests, either in the current session or in future sessions.		S-CLS-12560	A	The WK BCH CI shall provide the capability to save information selected in prior Metadata searches for use in subsequent Service Requests.
			S-CLS-13480	A	Users shall be able to save Search Request parameters at any time during the formulation of the Search Request.
			S-CLS-13490	A	Users shall be able to retrieve any previously saved Search Request parameters into a new Search Request, edit the parameters, save the modified parameters, and/or submit the new Search Request.
IMS-0190#B	The IMS shall provide the capability to save information selected in prior metadata searches for use in subsequent IMS service requests, either in the current session or in future sessions.		S-CLS-00330	B	The DESKT CI shall provide users the capability to add desktop objects to container objects.
			S-CLS-00340	B	The DESKT CI shall provide users the capability to remove desktop objects from container objects.
			S-CLS-00360	B	The DESKT CI shall provide users the capability to search container objects for objects which satisfy a user specified Search Criteria.
			S-CLS-00370	B	The DESKT CI shall provide users the capability to browse the objects contained in container objects.
			S-CLS-13500	B	Users shall be able to save the results of Search Requests.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-13510	B	Users shall be able to retrieve saved Search Results, delete items from the Search Result, and save the modified result.
			S-CLS-13520	B	Users shall be able to save selected portions of a Search Result.
			S-CLS-13530	B	Users shall be able to combine Search Results.
			S-CLS-13540	B	Users shall be able to select Data Granules from multiple saved Search Results and submit a single Data Request for these Data Granules.
			S-DMS-30110	B	The GTWAY CI shall provide the capability to save the result of a Service Request for later reuse.
			S-CLS-12560	A	The WKBCH CI shall provide the capability to save information selected in prior Metadata searches for use in subsequent Service Requests.
			S-CLS-13480	A	Users shall be able to save Search Request parameters at any time during the formulation of the Search Request.
			S-CLS-13490	A	Users shall be able to retrieve any previously saved Search Request parameters into a new Search Request, edit the parameters, save the modified parameters, and/or submit the new Search Request.
IMS-0210#A	The IMS shall allow data access privileges to be configurable by user and data type for: a. Read b. Write c. Update d. Delete e. Any combination of the above		S-IOS-00020	A	The ADSRV CI shall support interactive information management capabilities for authorized personnel to administer advertising data.
			S-IOS-00040	A	The ADSRV CI shall use the identification of the user on whose behalf a Service Request is issued as the basis for access control decisions.
			S-IOS-00050	A	Advertising accesses to data shall be subject to access controls of read, write, update and delete, singly or in combination, based on user privileges.
			S-IOS-00120	A	The ADSRV CI shall support an administration utility for administration of access control.
			S-IOS-00390	A	Advertising data accesses shall be subject to access controls of read, write, update and delete, singly or in combination, based on data types.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-IOS-00400	A	Advertising data accesses shall be subject to access controls of read, write, update and delete, singly or in combination, based on data ownership.
			S-IOS-00410	A	The capability to add, delete, or modify individual advertising data and service listings shall be limited to authorized users.
			S-DSS-00850	A	The SDSRV CI shall provide the capability to control access to Data Server services.
			S-DSS-00860	A	The SDSRV CI shall inform a client that a requested service is not accessible if the client attempts to access services outside their access level.
			S-DSS-00870	A	The SDSRV CI shall allow Data Access Privileges to be configurable by User Identifier and Data Type for read, write, update, delete, and any combination thereof.
			S-DSS-00880	A	The SDSRV CI shall use the User Identifier of the user on whose behalf a Service Request is issued as the basis for access control decisions.
			S-DSS-00950	A	The SDSRV CI shall support the processing of Data Requests subject to access controls of read, write, update and delete, singly or in a any combination, based on data types.
			S-DSS-00960	A	The SDSRV CI shall support the processing of Data Requests subject to access controls of read, write, update and delete, singly or in a any combination, based on data ownership.
IMS-0210#B	The IMS shall allow data access privileges to be configurable by user and data type for: a. Read b. Write c. Update d. Delete e. Any combination of the above		S-IOS-00020	A	The ADSRV CI shall support interactive information management capabilities for authorized personnel to administer advertising data.
			S-IOS-00040	A	The ADSRV CI shall use the identification of the user on whose behalf a Service Request is issued as the basis for access control decisions.
			S-IOS-00050	A	Advertising accesses to data shall be subject to access controls of read, write, update and delete, singly or in combination, based on user privileges.
			S-IOS-00120	A	The ADSRV CI shall support an administration utility for administration of access control.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-IOS-00390	A	Advertising data accesses shall be subject to access controls of read, write, update and delete, singly or in combination, based on data types.
			S-IOS-00400	A	Advertising data accesses shall be subject to access controls of read, write, update and delete, singly or in combination, based on data ownership.
			S-IOS-00410	A	The capability to add, delete, or modify individual advertising data and service listings shall be limited to authorized users.
			S-DSS-00850	A	The SDSRV CI shall provide the capability to control access to Data Server services.
			S-DSS-00860	A	The SDSRV CI shall inform a client that a requested service is not accessible if the client attempts to access services outside their access level.
			S-DSS-00870	A	The SDSRV CI shall allow Data Access Privileges to be configurable by User Identifier and Data Type for read, write, update, delete, and any combination thereof.
			S-DSS-00880	A	The SDSRV CI shall use the User Identifier of the user on whose behalf a Service Request is issued as the basis for access control decisions.
			S-DSS-00950	A	The SDSRV CI shall support the processing of Data Requests subject to access controls of read, write, update and delete, singly or in a any combination, based on data types.
			S-DSS-00960	A	The SDSRV CI shall support the processing of Data Requests subject to access controls of read, write, update and delete, singly or in a any combination, based on data ownership.
			S-DMS-00180	B	The LIMGR CI shall support interactive information management capabilities for administrators to retrieve information.
			S-DMS-00190	B	The LIMGR CI shall use the identification of the user on whose behalf a Service Request is issued as the basis for access control decisions.
			S-DMS-00200	B	The LIMGR CI shall forward the identification of the user on whose behalf a Service Request is issued to Data Servers for Service Requests issued on the behalf of the user.
			S-DMS-00540	B	The LIMGR CI data accesses shall be subject to read access controls based on data types, user privileges, and data ownership.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-10330	B	The DIMGR CI shall use the User Identifier for the user on whose behalf a Service Request is issued as the basis for access control decisions.
			S-DMS-10340	B	The DIMGR CI shall forward the user's User Identifier in any Service Requests that it sends to the LIMGR CI on behalf of that user..
			S-DMS-10600	B	The DIMGR CI data accesses shall be subject to read access control based on user privileges.
			S-DMS-20060	B	The DDICT CI shall provide the capability to define a global view of data dictionary entries based on the Earth Science Data Types accessible by the ECS
			S-DMS-20080	B	The DDICT CI shall provide consistent view of data dictionary entries based on the value given for an attribute.
			S-DMS-20110	B	The DDICT CI shall provide the capability to define a global data dictionary context.
			S-DMS-20120	B	The DDICT CI shall maintain information describing the relationships between Earth Science Data Types.
			S-DMS-20160	B	The DDICT CI shall have the capability to accept from the SDSRV CI Data Server, Export Files, for the purposes of defining new or updated data dictionary entries
			S-DMS-20190	B	The DDICT CI shall maintain consistency of semantic relationships between its data dictionary entries and data server Schema information from which they were derived.
			S-DMS-20200	B	The DDICT CI shall support additions, deletions and modifications to DDICT CI Schema.
			S-DMS-20210	B	The DDICT CI shall use the identification of the user on whose behalf a Service Request is issued as the basis for access control decisions.
			S-DMS-20220	B	The DDICT CI data accesses shall be subject to access controls of read, write, update and delete, singly or in combination, based on user privileges.
			S-DMS-20250	B	The DDICT CI shall store, maintain and provide data management services for ECS data dictionary entries.
			S-DMS-20290	B	The DDICT CI shall support an administration utility for administration of access control.
			S-DMS-20530	B	The DDICT CI shall support batch information management capabilities to add data dictionary entries.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-20540	B	The DDICT CI shall support batch information management capabilities to update data dictionary entries.
			S-DMS-20550	B	The DDICT CI shall support batch information management capabilities to delete data dictionary entries.
			S-DMS-20560	B	The DDICT CI shall support batch information management capabilities to retrieve data dictionary entries.
			S-DMS-20570	B	The DDICT CI shall support interactive information management capabilities to add data dictionary entries.
			S-DMS-20580	B	The DDICT CI shall support interactive information management capabilities to update data dictionary entries.
			S-DMS-20590	B	The DDICT CI shall support interactive information management capabilities to delete data dictionary entries.
			S-DMS-20600	B	The DDICT CI shall support interactive information management capabilities to retrieve data dictionary entries.
			S-DMS-20670	B	The DDICT CI shall establish access controls of read, write, update and delete, singly or in combination, based on data types.
			S-DMS-20680	B	The DDICT CI shall establish access controls of read, write, update and delete, singly or in combination, based on data ownership.
IMS-0220#A	The IMS shall store, maintain and provide data management services for ECS directory, inventory, and guide (documentation/reference material) and other IMS data bases.		S-DSS-03440	A	The SDSRV CI shall interface with the STMGT CI to provide storage for Science Software Archive Packages.
			S-DSS-03620	A	The SDSRV CI shall interface with the STMGT CI to provide storage for QA Statistics.
			S-DSS-04060	A	The SDSRV CI shall supply Science Software Archive Packages to the DDIST CI.
			S-DSS-04070	A	The SDSRV CI shall supply Metadata associated with Science Software Archive Packages to the DDIST CI.
			S-DSS-04200	A	The SDSRV CI shall supply Production History data to the DDIST CI.
			S-DSS-04210	A	The SDSRV CI shall supply Metadata associated with Production History data to the DDIST CI.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-04240	A	The SDSRV CI shall supply QA Statistics to the DDIST CI.
			S-DSS-04250	A	The SDSRV CI shall supply Metadata associated with QA Statistics to the DDIST CI.
			S-DSS-04650	A	The SDSRV CI shall accept Search Requests
			S-DSS-04660	A	The SDSRV CI shall provide Result Sets to the client, in response to Search Requests
			S-DSS-04700	A	The SDSRV CI shall provide Search Results to requesting agencies.
			S-DSS-10070	A	The DDSRV CI shall store, maintain and provide data management services for ECS guide (documentation/reference material).
			S-DSS-10220	A	The DDSRV CI shall receive Guide Data from Version 0.
			S-DSS-03450	A	The SDSRV CI shall provide storage for Metadata associated with Science Software Archive Packages.
			S-DSS-03580	A	The SDSRV CI shall interface with the STMGT CI to provide storage for Production History.
			S-DSS-03630	A	The SDSRV CI shall provide storage for Metadata associated with QA Statistics.
			S-DSS-03740	A	The SDSRV CI shall provide storage for validated Inventory data.
IMS-0220#B	The IMS shall store, maintain and provide data management services for ECS directory, inventory, and guide (documentation/reference material) and other IMS data bases.		S-DSS-03440	A	The SDSRV CI shall interface with the STMGT CI to provide storage for Science Software Archive Packages.
			S-DSS-03620	A	The SDSRV CI shall interface with the STMGT CI to provide storage for QA Statistics.
			S-DSS-04060	A	The SDSRV CI shall supply Science Software Archive Packages to the DDIST CI.
			S-DSS-04070	A	The SDSRV CI shall supply Metadata associated with Science Software Archive Packages to the DDIST CI.
			S-DSS-04200	A	The SDSRV CI shall supply Production History data to the DDIST CI.
			S-DSS-04210	A	The SDSRV CI shall supply Metadata associated with Production History data to the DDIST CI.
			S-DSS-04240	A	The SDSRV CI shall supply QA Statistics to the DDIST CI.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-04250	A	The SDSRV CI shall supply Metadata associated with QA Statistics to the DDIST CI.
			S-DSS-04650	A	The SDSRV CI shall accept Search Requests
			S-DSS-04660	A	The SDSRV CI shall provide Result Sets to the client, in response to Search Requests
			S-DSS-04700	A	The SDSRV CI shall provide Search Results to requesting agencies.
			S-DSS-10070	A	The DDSRV CI shall store, maintain and provide data management services for ECS guide (documentation/reference material).
			S-DSS-10220	A	The DDSRV CI shall receive Guide Data from Version 0.
			S-DMS-00220	B	The LIMGR CI shall store, maintain and provide data management services for ECS local Schema.
			S-DMS-00750	B	The LIMGR CI shall have the capability of creating, editing and deleting advertisements about itself and submitting them to the Advertising Service.
			S-DMS-01050	B	The LIMGR CI shall ensure that databases which are distributed and replicated provide synchronized data.
			S-DMS-10090	B	The DIMGR CI shall store, maintain and provide data management services for ECS federated Schema.
			S-DMS-11050	B	The DIMGR CI shall ensure that databases which are distributed and replicated provide synchronized data.
			S-DMS-20230	B	The DDICT CI shall ensure that databases which are distributed and replicated provide synchronized data.
			S-DMS-20250	B	The DDICT CI shall store, maintain and provide data management services for ECS data dictionary entries.
			S-DMS-20300	B	The DDICT CI shall support an administration utility for on-line full backup of Data Dictionary service data.
			S-DMS-31050	B	The GTWAY CI shall ensure that databases which are distributed and replicated provide synchronized data.
			S-DSS-03450	A	The SDSRV CI shall provide storage for Metadata associated with Science Software Archive Packages.
			S-DSS-03580	A	The SDSRV CI shall interface with the STMGT CI to provide storage for Production History.
			S-DSS-03630	A	The SDSRV CI shall provide storage for Metadata associated with QA Statistics.
			S-DSS-03740	A	The SDSRV CI shall provide storage for validated Inventory data.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-0230#A	The IMS shall restrict update of ECS directory, inventory, and guide (documentation/reference material) and other IMS data bases to authorized users based on the users access privileges.		S-IOS-00040	A	The ADSRV CI shall use the identification of the user on whose behalf a Service Request is issued as the basis for access control decisions.
			S-IOS-00050	A	Advertising accesses to data shall be subject to access controls of read, write, update and delete, singly or in combination, based on user privileges.
			S-IOS-00390	A	Advertising data accesses shall be subject to access controls of read, write, update and delete, singly or in combination, based on data types.
			S-IOS-00400	A	Advertising data accesses shall be subject to access controls of read, write, update and delete, singly or in combination, based on data ownership.
			S-IOS-00410	A	The capability to add, delete, or modify individual advertising data and service listings shall be limited to authorized users.
			S-DSS-00880	A	The SDSRV CI shall use the User Identifier of the user on whose behalf a Service Request is issued as the basis for access control decisions.
			S-DSS-00950	A	The SDSRV CI shall support the processing of Data Requests subject to access controls of read, write, update and delete, singly or in a any combination, based on data types.
			S-DSS-00960	A	The SDSRV CI shall support the processing of Data Requests subject to access controls of read, write, update and delete, singly or in a any combination, based on data ownership.
			S-IOS-00880	A	The ADSRV CI shall allow ECS personnel to review submitted advertisements before those advertisements are posted for general access.
IMS-0230#B	The IMS shall restrict update of ECS directory, inventory, and guide (documentation/reference material) and other IMS data bases to authorized users based on the users access privileges.		S-IOS-00040	A	The ADSRV CI shall use the identification of the user on whose behalf a Service Request is issued as the basis for access control decisions.
			S-IOS-00050	A	Advertising accesses to data shall be subject to access controls of read, write, update and delete, singly or in combination, based on user privileges.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-IOS-00390	A	Advertising data accesses shall be subject to access controls of read, write, update and delete, singly or in combination, based on data types.
			S-IOS-00400	A	Advertising data accesses shall be subject to access controls of read, write, update and delete, singly or in combination, based on data ownership.
			S-IOS-00410	A	The capability to add, delete, or modify individual advertising data and service listings shall be limited to authorized users.
			S-DSS-00880	A	The SDSRV CI shall use the User Identifier of the user on whose behalf a Service Request is issued as the basis for access control decisions.
			S-DSS-00950	A	The SDSRV CI shall support the processing of Data Requests subject to access controls of read, write, update and delete, singly or in a any combination, based on data types.
			S-DSS-00960	A	The SDSRV CI shall support the processing of Data Requests subject to access controls of read, write, update and delete, singly or in a any combination, based on data ownership.
			S-IOS-00880	A	The ADSRV CI shall allow ECS personnel to review submitted advertisements before those advertisements are posted for general access.
			S-CLS-15920	B	The Client Visualization Tool shall support display of multiple images.
			S-DMS-00190	B	The LIMGR CI shall use the identification of the user on whose behalf a Service Request is issued as the basis for access control decisions.
			S-DMS-00200	B	The LIMGR CI shall forward the identification of the user on whose behalf a Service Request is issued to Data Servers for Service Requests issued on the behalf of the user.
			S-DMS-00540	B	The LIMGR CI data accesses shall be subject to read access controls based on data types, user privileges, and data ownership.
			S-DMS-10330	B	The DIMGR CI shall use the User Identifier for the user on whose behalf a Service Request is issued as the basis for access control decisions.
			S-DMS-10340	B	The DIMGR CI shall forward the user's User Identifier in any Service Requests that it sends to the LIMGR CI on behalf of that user..

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-10600	B	The DIMGR CI data accesses shall be subject to read access control based on user privileges.
			S-DMS-20070	B	The data dictionary support variations within data dictionary entries shall be based on data context and instrument.
			S-DMS-20210	B	The DDICT CI shall use the identification of the user on whose behalf a Service Request is issued as the basis for access control decisions.
			S-DMS-20220	B	The DDICT CI data accesses shall be subject to access controls of read, write, update and delete, singly or in combination, based on user privileges.
			S-DMS-20310	B	The DDICT CI shall support an administration utility for on-line incremental backup of Data Dictionary service data.
			S-DMS-20320	B	The DDICT CI shall support an administration utility for manual recovery of Data Dictionary data from system and media failures.
			S-DMS-20330	B	The DDICT CI shall support an administration utility for automatic recovery of DDICT CI data from system failures.
			S-DMS-20670	B	The DDICT CI shall establish access controls of read, write, update and delete, singly or in combination, based on data types.
			S-DMS-20680	B	The DDICT CI shall establish access controls of read, write, update and delete, singly or in combination, based on data ownership.
			S-DMS-20690	B	The DDICT CI shall provide the capability to add, delete, or modify dictionary entries to authorized users.
			S-DMS-20890	B	The DDICT CI shall provide maintain Valid Values for data elements, where the data element has an enumerated set of values as a constraint.
IMS-0240#A	The IMS shall provide, at a minimum, data base administration utilities for: a. Modifying the data base schema b. Performance monitoring c. Performance tuning d. Administration of user access control e. On-line incremental backup f. On-line recovery g. Export/import of data		S-IOS-00100	A	The ADSRV CI shall support an administration utility for performance monitoring of database query processing.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-IOS-00110	A	The ADSRV CI shall support an administration utility for performance tuning.
			S-IOS-00120	A	The ADSRV CI shall support an administration utility for administration of access control.
			S-IOS-00130	A	The ADSRV CI shall support an administration utility for on-line full backup and restoration of advertising service data.
			S-IOS-00140	A	The ADSRV CI shall support an administration utility for on-line incremental backup and restoration of advertising service data.
			S-IOS-00150	A	Advertising shall support an administration utility for manual recovery of advertising service data from media and system failures.
			S-IOS-00160	A	The ADSRV CI shall support an administration utility for automatic recovery of advertising service data from system failures.
			S-IOS-00170	A	The ADSRV CI shall support a data administration utility for data import.
			S-IOS-00180	A	The ADSRV CI shall support a data administration utility for data export.
			S-DSS-00550	A	The SDSRV CI shall provide the capability for operations staff to view Schema Information.
			S-DSS-00570	A	The SDSRV CI shall provide the capability for operations staff to update Schema Information.
			S-DSS-03750	A	The SDSRV CI shall support Schema Information for each Data Type.
			S-DSS-00850	A	The SDSRV CI shall provide the capability to control access to Data Server services.
			S-DSS-00860	A	The SDSRV CI shall inform a client that a requested service is not accessible if the client attempts to access services outside their access level.
			S-DSS-00870	A	The SDSRV CI shall allow Data Access Privileges to be configurable by User Identifier and Data Type for read, write, update, delete, and any combination thereof.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-0240#B	The IMS shall provide, at a minimum, data base administration utilities for: a. Modifying the data base schema b. Performance monitoring c. Performance tuning d. Administration of user access control e. On-line incremental backup f. On-line recovery g. Export/import of data		S-IOS-00100	A	The ADSRV CI shall support an administration utility for performance monitoring of database query processing.
			S-IOS-00110	A	The ADSRV CI shall support an administration utility for performance tuning.
			S-IOS-00120	A	The ADSRV CI shall support an administration utility for administration of access control.
			S-IOS-00130	A	The ADSRV CI shall support an administration utility for on-line full backup and restoration of advertising service data.
			S-IOS-00140	A	The ADSRV CI shall support an administration utility for on-line incremental backup and restoration of advertising service data.
			S-IOS-00150	A	Advertising shall support an administration utility for manual recovery of advertising service data from media and system failures.
			S-IOS-00160	A	The ADSRV CI shall support an administration utility for automatic recovery of advertising service data from system failures.
			S-IOS-00170	A	The ADSRV CI shall support a data administration utility for data import.
			S-IOS-00180	A	The ADSRV CI shall support a data administration utility for data export.
			S-DSS-00550	A	The SDSRV CI shall provide the capability for operations staff to view Schema Information.
			S-DSS-00570	A	The SDSRV CI shall provide the capability for operations staff to update Schema Information.
			S-DSS-03750	A	The SDSRV CI shall support Schema Information for each Data Type.
			S-DSS-00850	A	The SDSRV CI shall provide the capability to control access to Data Server services.
			S-DSS-00860	A	The SDSRV CI shall inform a client that a requested service is not accessible if the client attempts to access services outside their access level.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-00870	A	The SDSRV CI shall allow Data Access Privileges to be configurable by User Identifier and Data Type for read, write, update, delete, and any combination thereof.
			S-DMS-60300	A	The DMGHW CI shall be configured to support the SDPS function of information searches on the ECS directory's availability requirement of .993 and a mean down time (MDT) requirement of < 2 hours during times of staffed operations.
			S-DMS-00240	B	In the case of processing failures, upon restart the LIMGR CI shall complete all incomplete transactions without loss of data.
			S-DMS-00270	B	The LIMGR CI shall support revisions of its local Schema following Schema changes in the Data Servers represented in the LIMs local Schema.
			S-DMS-00280	B	The LIMGR CI shall provide a data administration utility for adding, deleting, modifying, and expanding individual Schema.
			S-DMS-10120	B	In the case of processing failures, upon restart the DIMGR CI shall complete all incomplete transactions without loss of data.
			S-DMS-10150	B	The DIMGR CI shall support revisions of its federated Schema following Schema changes in the LIMs represented in the DIM's federated Schema.
			S-DMS-10240	B	The DIMGR CI shall provide a data administration utility for adding, deleting, modifying, and expanding an individual Schema.
			S-DMS-20200	B	The DDICT CI shall support additions, deletions and modifications to DDICT CI Schema.
			S-DMS-20260	B	The DDICT CI shall support an administration utility for performance monitoring of system disk, memory, CPU and Input/Output.
			S-DMS-20270	B	The DDICT CI shall support an administration utility for performance monitoring of Service Requests processing.
			S-DMS-20280	B	The DDICT CI shall support an administration utility for performance tuning.
			S-DMS-20290	B	The DDICT CI shall support an administration utility for administration of access control.
			S-DMS-20300	B	The DDICT CI shall support an administration utility for on-line full backup of Data Dictionary service data.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-20310	B	The DDICT CI shall support an administration utility for on-line incremental backup of Data Dictionary service data.
			S-DMS-20320	B	The DDICT CI shall support an administration utility for manual recovery of Data Dictionary data from system and media failures.
			S-DMS-20330	B	The DDICT CI shall support an administration utility for automatic recovery of DDICT CI data from system failures.
			S-DMS-20340	B	The DDICT CI shall support a data administration utility for data import.
			S-DMS-20350	B	The DDICT CI shall support a data administration utility for data export.
			S-DMS-20530	B	The DDICT CI shall support batch information management capabilities to add data dictionary entries.
			S-DMS-20540	B	The DDICT CI shall support batch information management capabilities to update data dictionary entries.
			S-DMS-20880	B	The DDICT CI shall have the capability to receive from the Data Administrator, Data Administration Requests
			S-DSS-00770	B	The SDSRV CI shall utilize vendor supplied tools to analyze system CPU performance.
			S-DSS-00780	B	The SDSRV CI shall utilize vendor supplied tools to monitor the performance of query processing.
			S-DSS-00790	B	The SDSRV CI shall utilize vendor supplied tools to analyze system storage performance.
			S-DSS-00800	B	The SDSRV CI shall utilize vendor supplied tools to tune system throughput performance.
			S-DSS-00810	B	The SDSRV CI shall utilize vendor supplied tools to analyze system throughput performance.
			S-DSS-01360	B	The SDSRV CI shall, in the event of a restart after a processing failure, recover the state of all Service Requests, including the rollback of all incomplete Data Base Transactions, and the recovery of all complete Data Base Transactions.
			S-DSS-10231	B	The DDSRV CI shall utilize vendor supplied tools to analyze system CPU performance.
			S-DSS-10232	B	The DDSRV CI shall utilize vendor supplied tools to analyze system throughput performance.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-0250#A	The IMS shall provide required maintenance of the IMS data bases, to include at a minimum: a. Capability to restructure the data base b. Capability to interrupt a maintenance session and restart the session without loss of information		S-IOS-00330	A	The ADSRV CI shall support the interruption of any administrative or maintenance activity and its restart without loss of information.
			S-IOS-00060	A	Advertising internal data base management queries shall be expressed in standard query language (SQL).
			S-DSS-00570	A	The SDSRV CI shall provide the capability for operations staff to update Schema Information.
			S-DSS-00610	A	The SDSRV CI shall provide the capability for operations staff to delete Schema Information.
			S-DSS-03750	A	The SDSRV CI shall support Schema Information for each Data Type.
			S-DSS-00900	A	The SDSRV CI shall support the interruption of a data base administrative or maintenance activity and its restart without loss of information.
			S-DSS-00901	A	The SDSRV CI shall provide tools for database backup and restore.
			S-DSS-00902	A	The SDSRV CI shall provide a database management capability that maintains database integrity during concurrent user interactions.
IMS-0250#B	The IMS shall provide required maintenance of the IMS data bases, to include at a minimum: a. Capability to restructure the data base b. Capability to interrupt a maintenance session and restart the session without loss of information		S-IOS-00330	A	The ADSRV CI shall support the interruption of any administrative or maintenance activity and its restart without loss of information.
			S-IOS-00060	A	Advertising internal data base management queries shall be expressed in standard query language (SQL).
			S-DSS-00570	A	The SDSRV CI shall provide the capability for operations staff to update Schema Information.
			S-DSS-00610	A	The SDSRV CI shall provide the capability for operations staff to delete Schema Information.
			S-DSS-03750	A	The SDSRV CI shall support Schema Information for each Data Type.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-00900	A	The SDSRV CI shall support the interruption of a data base administrative or maintenance activity and its restart without loss of information.
			S-DSS-00901	A	The SDSRV CI shall provide tools for database backup and restore.
			S-DSS-00902	A	The SDSRV CI shall provide a database management capability that maintains database integrity during concurrent user interactions.
			S-DMS-00270	B	The LIMGR CI shall support revisions of its local Schema following Schema changes in the Data Servers represented in the LIMs local Schema.
			S-DMS-00280	B	The LIMGR CI shall provide a data administration utility for adding, deleting, modifying, and expanding individual Schema.
			S-DMS-00470	B	The LIMGR CI shall support the interruption of any database administrative or maintenance activity and its restart without loss of information.
			S-DMS-10120	B	In the case of processing failures, upon restart the DIMGR CI shall complete all incomplete transactions without loss of data.
			S-DMS-10150	B	The DIMGR CI shall support revisions of its federated Schema following Schema changes in the LIMs represented in the DIM's federated Schema.
			S-DMS-10240	B	The DIMGR CI shall provide a data administration utility for adding, deleting, modifying, and expanding an individual Schema.
			S-DMS-10460	B	The DIMGR CI shall support the interruption of a database administrative or maintenance activity and its restart without loss of information.
			S-DMS-20200	B	The DDICT CI shall support additions, deletions and modifications to DDICT CI Schema.
			S-DMS-20550	B	The DDICT CI shall support batch information management capabilities to delete data dictionary entries.
			S-DMS-20640	B	The DDICT CI shall support the restart of database administration and maintenance activities which are unintentionally interrupted through system software or hardware failure, without loss of information.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-0260#A	The IMS shall provide interactive and batch information management capabilities for authorized users to add, update, delete, and retrieve information from the IMS data bases.		S-IOS-00020	A	The ADSRV CI shall support interactive information management capabilities for authorized personnel to administer advertising data.
			S-IOS-00050	A	Advertising accesses to data shall be subject to access controls of read, write, update and delete, singly or in combination, based on user privileges.
			S-IOS-00390	A	Advertising data accesses shall be subject to access controls of read, write, update and delete, singly or in combination, based on data types.
			S-IOS-00400	A	Advertising data accesses shall be subject to access controls of read, write, update and delete, singly or in combination, based on data ownership.
			S-DSS-03760	A	The SDSRV CI Schema Information shall include for each Data Type the structure of that Data Type.
			S-DSS-03770	A	The SDSRV CI Schema Information shall include for each Data Type the services available for that Data Type.
			S-DSS-03780	A	The SDSRV CI Schema Information shall include for each Data Type the Data Type Attributes for that Data Type and the Valid Values associated with each Data Type Attribute.
			S-DSS-00950	A	The SDSRV CI shall support the processing of Data Requests subject to access controls of read, write, update and delete, singly or in a any combination, based on data types.
			S-DSS-00960	A	The SDSRV CI shall support the processing of Data Requests subject to access controls of read, write, update and delete, singly or in a any combination, based on data ownership.
			S-DSS-01120	A	The SDSRV CI shall provide the capability to manage multiple Service Requests from clients.
			S-DSS-01130	A	The SDSRV CI shall provide the capability to process Service Requests asynchronously.
IMS-0260#B	The IMS shall provide interactive and batch information management capabilities for authorized users to add, update, delete, and retrieve information from the IMS data bases.		S-IOS-00020	A	The ADSRV CI shall support interactive information management capabilities for authorized personnel to administer advertising data.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-IOS-00050	A	Advertising accesses to data shall be subject to access controls of read, write, update and delete, singly or in combination, based on user privileges.
			S-IOS-00390	A	Advertising data accesses shall be subject to access controls of read, write, update and delete, singly or in combination, based on data types.
			S-IOS-00400	A	Advertising data accesses shall be subject to access controls of read, write, update and delete, singly or in combination, based on data ownership.
			S-DSS-03760	A	The SDSRV CI Schema Information shall include for each Data Type the structure of that Data Type.
			S-DSS-03770	A	The SDSRV CI Schema Information shall include for each Data Type the services available for that Data Type.
			S-DSS-03780	A	The SDSRV CI Schema Information shall include for each Data Type the Data Type Attributes for that Data Type and the Valid Values associated with each Data Type Attribute.
			S-DSS-00950	A	The SDSRV CI shall support the processing of Data Requests subject to access controls of read, write, update and delete, singly or in a any combination, based on data types.
			S-DSS-00960	A	The SDSRV CI shall support the processing of Data Requests subject to access controls of read, write, update and delete, singly or in a any combination, based on data ownership.
			S-DSS-01120	A	The SDSRV CI shall provide the capability to manage multiple Service Requests from clients.
			S-DSS-01130	A	The SDSRV CI shall provide the capability to process Service Requests asynchronously.
			S-CLS-12110	B	The WKBCH CI shall provide a GUI interface with a command language.
			S-CLS-12860	B	The WKBCH CI shall provide a dumb terminal interface with a command language.
			S-CLS-15980	B	The WKBCH CI shall provide a capability for users to submit software and related documents.
			S-DMS-00180	B	The LIMGR CI shall support interactive information management capabilities for administrators to retrieve information.
			S-DMS-00540	B	The LIMGR CI data accesses shall be subject to read access controls based on data types, user privileges, and data ownership.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-10600	B	The DIMGR CI data accesses shall be subject to read access control based on user privileges.
			S-DMS-20220	B	The DDICT CI data accesses shall be subject to access controls of read, write, update and delete, singly or in combination, based on user privileges.
			S-DMS-20530	B	The DDICT CI shall support batch information management capabilities to add data dictionary entries.
			S-DMS-20540	B	The DDICT CI shall support batch information management capabilities to update data dictionary entries.
			S-DMS-20550	B	The DDICT CI shall support batch information management capabilities to delete data dictionary entries.
			S-DMS-20560	B	The DDICT CI shall support batch information management capabilities to retrieve data dictionary entries.
			S-DMS-20570	B	The DDICT CI shall support interactive information management capabilities to add data dictionary entries.
			S-DMS-20580	B	The DDICT CI shall support interactive information management capabilities to update data dictionary entries.
			S-DMS-20590	B	The DDICT CI shall support interactive information management capabilities to delete data dictionary entries.
			S-DMS-20600	B	The DDICT CI shall support interactive information management capabilities to retrieve data dictionary entries.
			S-DMS-20670	B	The DDICT CI shall establish access controls of read, write, update and delete, singly or in combination, based on data types.
			S-DMS-20680	B	The DDICT CI shall establish access controls of read, write, update and delete, singly or in combination, based on data ownership.
			S-DSS-00310	B	The SDSRV CI shall provide the capability for authorized clients to submit Service Requests batch mode.
IMS-0270#B	IMS shall maintain information on the science processing library holdings and provide the capability for users to search for and order science processing library software.		S-CLS-10210	B	The WK BCH CI shall provide users the capability to search for Science Processing Library holdings

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-IOS-00590	B	The ADSRV CI shall provide Advertisements that describe Science Processing Library holdings.
IMS-0280#B	The IMS shall maintain DAR generation information, for example, instrument information received from the ICC and spacecraft information received from the EOC, in a data base which will be accessible during the DAR planning and submittal process.	B: ASTER GDS interfaces to EDC DAAC only. B: ASTER DARS only?	S-CLS-13250	B	The WKBCH CI shall provide users the capability to view DAR generation information during the DAR planning and submittal process.
			S-CLS-14460	B	The WKBCH CI shall make spacecraft schedules accessible to authorized users on request.
			S-CLS-14470	B	The WKBCH CI shall display spacecraft schedules as timelines.
			S-DSS-04730	B	The SDSRV CI shall accept DARs from the client.
IMS-0290#A	IMS internal data base management queries shall be expressed in a standard query language.		S-IOS-00060	A	Advertising internal data base management queries shall be expressed in standard query language (SQL).
IMS-0290#B	IMS internal data base management queries shall be expressed in a standard query language.		S-IOS-00060	A	Advertising internal data base management queries shall be expressed in standard query language (SQL).
			S-DMS-00210	B	The LIMGR CI internal data base management shall be expressed in a <TBD> standard query language
			S-DMS-10610	B	The DIMGR CI internal data base management Queries shall be expressed in a <TBD> query language
IMS-0300#A	The IMS shall maintain a log of all information update activity.		S-IOS-00220	A	The ADSRV CI shall maintain a log of all information read, write, update and delete activity.
			S-DSS-03030	A	The SDSRV CI shall be capable of receiving Science Software Archive Packages.
IMS-0300#B	The IMS shall maintain a log of all information update activity.		S-IOS-00220	A	The ADSRV CI shall maintain a log of all information read, write, update and delete activity.
			S-DSS-03030	A	The SDSRV CI shall be capable of receiving Science Software Archive Packages.
			S-DMS-20610	B	The DDICT CI shall maintain a log of all insertions, updates and deletions of data dictionary entries

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-0320#A	<p>Standard Product related metadata shall contain, at a minimum:</p> <ul style="list-style-type: none"> a. Keywords and glossary from investigators b. Keywords, synonyms, and glossary for cross-product and cross-directory referencing c. Identifiers for locating products in the DADS archive by granule d. Documentation on algorithms, including version history, authors, written description of product, equations, and references e. Documentation on instrument(s) and spacecraft(s) including history of housekeeping and ancillary parameters, discipline characterization, calibration parameters, key individuals, and references f. Identifiers, algorithms, written descriptions, equations, authors, and references associated with static browse products and subsetted, subsampled, and summary data products g. Published papers, research results, significant results, and references by author and date h. Key organizations and personnel for all product-related DAACs, ADCs, and ODCs i. Granule-specific information as listed in Tables C-10 and C-11 in Appendix C 		S-DSS-03760	A	The SDSRV CI Schema Information shall include for each Data Type the structure of that Data Type.
			S-DSS-03770	A	The SDSRV CI Schema Information shall include for each Data Type the services available for that Data Type.
			S-DSS-03780	A	The SDSRV CI Schema Information shall include for each Data Type the Data Type Attributes for that Data Type and the Valid Values associated with each Data Type Attribute.
			S-DSS-04360	A	The SDSRV CI shall include granule-specific information as defined in the SDPS Core Metadata Baseline (194-00269TPW).
			S-DSS-04390	A	Standard Product related Metadata at the Data Server shall include Metadata associated with static subsetted, subsampled, and summary products.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-IOS-00860	A	The ADSRV CI shall contain advertisements that include key organizations and personnel for all product-related DAACs, ADCs, and ODCs.
			S-DSS-04380	A	The STMGT CI shall store the following Metadata: granule id, date and time of storage, data check status and data format type.
			S-DSS-04420	A	The SDSRV CI shall have the ability to store references to instrument engineering data as Metadata for science data.
			S-DSS-04430	A	The SDSRV CI shall have the ability to store references to Science Software Archive Packages as Metadata for science data.
			S-DSS-04490	A	The SDSRV CI shall have the ability to store references to reference documentation as Metadata for science data.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-0320#B	<p>Standard Product related metadata shall contain, at a minimum:</p> <ul style="list-style-type: none"> a. Keywords and glossary from investigators b. Keywords, synonyms, and glossary for cross-product and cross-directory referencing c. Identifiers for locating products in the DADS archive by granule d. Documentation on algorithms, including version history, authors, written description of product, equations, and references e. Documentation on instrument(s) and spacecraft(s) including history of housekeeping and ancillary parameters, discipline characterization, calibration parameters, key individuals, and references f. Identifiers, algorithms, written descriptions, equations, authors, and references associated with static browse products and subsetted, subsampled, and summary data products g. Published papers, research results, significant results, and references by author and date h. Key organizations and personnel for all product-related DAACs, ADCs, and ODCs i. Granule-specific information as listed in Tables C-10 and C-11 in Appendix C 		S-DSS-03760	A	The SDSRV CI Schema Information shall include for each Data Type the structure of that Data Type.
			S-DSS-03770	A	The SDSRV CI Schema Information shall include for each Data Type the services available for that Data Type.
			S-DSS-03780	A	The SDSRV CI Schema Information shall include for each Data Type the Data Type Attributes for that Data Type and the Valid Values associated with each Data Type Attribute.
			S-DSS-04360	A	The SDSRV CI shall include granule-specific information as defined in the SDPS Core Metadata Baseline (194-00269TPW).
			S-DSS-04390	A	Standard Product related Metadata at the Data Server shall include Metadata associated with static subsetted, subsampled, and summary products.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-IOS-00860	A	The ADSRV CI shall contain advertisements that include key organizations and personnel for all product-related DAACs, ADCs, and ODCs.
			S-CLS-10730	B	The WKBCH CI shall provide users the capability to search data dictionary information to obtain the precise definitions of terms used within ECS.
			S-CLS-14530	B	The WKBCH CI shall provide users access to Data Definitions of the following information at a minimum: a._Earth Science Data Types and services descriptions b._core metadata attribute definitions c._valid values d._synonyms for valid values e._product specific metadata
			S-CLS-14540	B	Standard Product related Metadata accessible to users shall include keywords and glossary from investigators.
			S-CLS-14550	B	Standard Product related Metadata accessible to users shall include of keywords, synonyms, and glossary for cross-product and cross-directory referencing.
			S-CLS-14580	B	The WKBCH CI shall provide users a consistent view of data dictionary entries based on the value given for an attribute.
			S-CLS-14590	B	The WKBCH CI shall have the capability to send to the Data Dictionary CI, data dictionary information requests, consisting of any combination of the following: Earth Science Data Types, Core Metadata attribute, Product Specific Metadata.
			S-CLS-14600	B	The WKBCH CI shall have the capability to receive from the Data Dictionary CI
			S-DMS-20005	B	The DDICT CI shall provide access to Data Definitions of the following information at a minimum: a._Earth Science Data Types and services descriptions b._core metadata attribute definitions c._valid values d._synonyms for valid values e._product specific metadata
			S-DMS-20030	B	The DDICT CI shall provide the capability to view data dictionary entries based on the Earth Science Data Types accessible by an instance of the Data Server.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-20040	B	The DDICT CI shall provide the capability to view data dictionary entries based on the Earth Science Data Types accessible by an instance of the LIM
			S-DMS-20050	B	The DDICT CI shall provide the capability to view data dictionary entries based on the Earth Science Data Types accessible by an instance of the DIM.
			S-DMS-20060	B	The DDICT CI shall provide the capability to define a global view of data dictionary entries based on the Earth Science Data Types accessible by the ECS
			S-DMS-20080	B	The DDICT CI shall provide consistent view of data dictionary entries based on the value given for an attribute.
			S-DMS-20090	B	The DDICT CI shall provide the capability to define data dictionary contexts based on science disciplines, site, and instrument.
			S-DMS-20110	B	The DDICT CI shall provide the capability to define a global data dictionary context.
			S-DMS-20120	B	The DDICT CI shall maintain information describing the relationships between Earth Science Data Types.
			S-DMS-20140	B	The DDICT CI shall have the capability to send to the Workbench CI: a._Earth Science data type descriptions b._core metadata attribute definitions, domains and synonyms c._product specific metadata attribute definitions, domains and synonyms.
			S-DMS-20160	B	The DDICT CI shall have the capability to accept from the SDSRV CI Data Server, Export Files, for the purposes of defining new or updated data dictionary entries
			S-DMS-20170	B	The DDICT CI shall have the capability to accept from the LIM CI, Export Files, for the purposes of defining new or updated data dictionary entries
			S-DMS-20180	B	The DDICT CI shall have the capability to accept from the DIM CI, Export Files, for the purposes of defining new or updated data dictionary entries
			S-DMS-20190	B	The DDICT CI shall maintain consistency of semantic relationships between its data dictionary entries and data server Schema information from which they were derived.
			S-DMS-20530	B	The DDICT CI shall support batch information management capabilities to add data dictionary entries.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-20540	B	The DDICT CI shall support batch information management capabilities to update data dictionary entries.
			S-DMS-20550	B	The DDICT CI shall support batch information management capabilities to delete data dictionary entries.
			S-DMS-20560	B	The DDICT CI shall support batch information management capabilities to retrieve data dictionary entries.
			S-DMS-20570	B	The DDICT CI shall support interactive information management capabilities to add data dictionary entries.
			S-DMS-20580	B	The DDICT CI shall support interactive information management capabilities to update data dictionary entries.
			S-DMS-20590	B	The DDICT CI shall support interactive information management capabilities to delete data dictionary entries.
			S-DMS-20600	B	The DDICT CI shall support interactive information management capabilities to retrieve data dictionary entries.
			S-DMS-20620	B	Standard Product related Metadata at the DDICT CI shall include keywords and glossary from investigators.
			S-DMS-20630	B	Standard Product related Metadata at the DDICT CI shall include of keywords, synonyms, and glossary for cross-product and cross-directory referencing.
			S-DMS-20640	B	The DDICT CI shall support the restart of database administration and maintenance activities which are unintentionally interrupted through system software or hardware failure, without loss of information.
			S-DMS-20670	B	The DDICT CI shall establish access controls of read, write, update and delete, singly or in combination, based on data types.
			S-DMS-21020	B	The DDICT CI shall contain a thesarus of data dictionary entries.
			S-DSS-04380	A	The STMGT CI shall store the following Metadata: granule id, date and time of storage, data check status and data format type.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-20130	B	The DDICT CI shall have the capability to accept from the Workbench CI data dictionary search requests consisting of any combination of the following: Earth Science Data Types, Core Metadata attribute, and Product Specific Metadata in a format compatible with the Earth Science Query Language.
			S-DSS-04420	A	The SDSRV CI shall have the ability to store references to instrument engineering data as Metadata for science data.
			S-DSS-04430	A	The SDSRV CI shall have the ability to store references to Science Software Archive Packages as Metadata for science data.
			S-DSS-04490	A	The SDSRV CI shall have the ability to store references to reference documentation as Metadata for science data.
IMS-0330#A	The metadata maintained by the IMS shall provide a cross reference that relates science data to the following at a minimum: a. Calibration data, navigation data, and instrument engineering data b. Processing algorithms used for data generation at the PGS c. Software used for data generation at the PGS d. Parameters used for data generation at the PGS e. Input data used for data generation at the PGS f. Data recipients g. The PGS at which the data was processed h. QA and validation data, reports, and algorithms		S-DSS-04670	A	The SDSRV CI shall support Inventory searches based on the Core Inventory Metadata.
			S-DSS-04680	A	The SDSRV CI shall support Inventory searches based on the Product Specific Metadata.
			S-DSS-04690	A	The SDSRV CI shall support Inventory searches based on a combination of the Core Inventory Metadata and Product Specific Metadata.
			S-DSS-04400	A	The SDSRV CI shall have the ability to store references to calibration data as Metadata for science data.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-04420	A	The SDSRV CI shall have the ability to store references to instrument engineering data as Metadata for science data.
			S-DSS-04430	A	The SDSRV CI shall have the ability to store references to Science Software Archive Packages as Metadata for science data.
			S-DSS-04450	A	The SDSRV CI shall have the ability to store references to Production History data as Metadata for science data.
			S-DSS-04440	A	The SDSRV CI shall have the ability to store references to data generation software as Metadata for science data.
			S-DSS-04460	A	The SDSRV CI shall have the ability to store references to data recipients as Metadata for science data.
			S-DSS-04470	A	The SDSRV CI shall have the ability to store references to the data production facility as Metadata for science data.
			S-DSS-04480	A	The SDSRV CI shall have the ability to store references to QA Statistics as Metadata for science data.
IMS-0330#B	The metadata maintained by the IMS shall provide a cross reference that relates science data to the following at a minimum: a. Calibration data, navigation data, and instrument engineering data b. Processing algorithms used for data generation at the PGS c. Software used for data generation at the PGS d. Parameters used for data generation at the PGS e. Input data used for data generation at the PGS f. Data recipients g. The PGS at which the data was processed h. QA and validation data, reports, and algorithms		S-DSS-04670	A	The SDSRV CI shall support Inventory searches based on the Core Inventory Metadata.
			S-DSS-04680	A	The SDSRV CI shall support Inventory searches based on the Product Specific Metadata.
			S-DSS-04690	A	The SDSRV CI shall support Inventory searches based on a combination of the Core Inventory Metadata and Product Specific Metadata.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-04410	B	The SDSRV CI's MD Component shall have the ability to store references to Orbit/Attitude Data as Metadata for science data.
			S-DSS-04400	A	The SDSRV CI shall have the ability to store references to calibration data as Metadata for science data.
			S-DSS-04420	A	The SDSRV CI shall have the ability to store references to instrument engineering data as Metadata for science data.
			S-DSS-04430	A	The SDSRV CI shall have the ability to store references to Science Software Archive Packages as Metadata for science data.
			S-DSS-04450	A	The SDSRV CI shall have the ability to store references to Production History data as Metadata for science data.
			S-DSS-04440	A	The SDSRV CI shall have the ability to store references to data generation software as Metadata for science data.
			S-DSS-04460	A	The SDSRV CI shall have the ability to store references to data recipients as Metadata for science data.
			S-DSS-04470	A	The SDSRV CI shall have the ability to store references to the data production facility as Metadata for science data.
			S-DSS-04480	A	The SDSRV CI shall have the ability to store references to QA Statistics as Metadata for science data.
IMS-0340#A	The metadata maintained by the IMS shall contain content-based summary information, including statistical summaries and granule features, for all ECS standard and special products.		S-DSS-04680	A	The SDSRV CI shall support Inventory searches based on the Product Specific Metadata.
			S-DSS-04690	A	The SDSRV CI shall support Inventory searches based on a combination of the Core Inventory Metadata and Product Specific Metadata.
IMS-0340#B	The metadata maintained by the IMS shall contain content-based summary information, including statistical summaries and granule features, for all ECS standard and special products.		S-DSS-04680	A	The SDSRV CI shall support Inventory searches based on the Product Specific Metadata.
			S-DSS-04690	A	The SDSRV CI shall support Inventory searches based on a combination of the Core Inventory Metadata and Product Specific Metadata.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-10010	B	The WKBCH CI shall provide the capability for users to compose Search Requests based on product specific and core metadata attributes.
			S-CLS-10220	B	The WKBCH CI shall allow users to formulate a Data Request based on the results of searching the inventory core metadata attributes and inventory product specific metadata attributes.
			S-CLS-10240	B	The WKBCH CI shall provide the capability for users to request subsetted, subsampled, and summary products.
IMS-0350#A	The IMS shall provide the capability for authorized personnel to add, delete, or modify ECS metadata entries, individually or in groups.		S-IOS-00050	A	Advertising accesses to data shall be subject to access controls of read, write, update and delete, singly or in combination, based on user privileges.
			S-IOS-00230	A	The ADSRV CI shall provide the capability to add, delete, or modify individual Advertisements.
			S-IOS-00390	A	Advertising data accesses shall be subject to access controls of read, write, update and delete, singly or in combination, based on data types.
			S-IOS-00400	A	Advertising data accesses shall be subject to access controls of read, write, update and delete, singly or in combination, based on data ownership.
			S-DSS-00950	A	The SDSRV CI shall support the processing of Data Requests subject to access controls of read, write, update and delete, singly or in a any combination, based on data types.
			S-DSS-00960	A	The SDSRV CI shall support the processing of Data Requests subject to access controls of read, write, update and delete, singly or in a any combination, based on data ownership.
			S-DSS-00970	A	The SDSRV CI shall provide the capabilities to add, delete, or modify ECS Metadata to authorized users only.
			S-DSS-04570	A	The SDSRV CI shall provide services to add to the existing Inventory
			S-DSS-04580	A	The SDSRV CI shall provide services to delete from the existing Inventory
			S-DSS-04590	A	The SDSRV CI shall provide services to modify the existing Inventory
			S-DSS-10051	A	The DDSRV CI shall provide the capability to add, delete, or modify individual ECS Metadata entries.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-10080	A	The DDSRV CI shall provide the capability to add, delete, or modify groups of ECS Metadata entries.
IMS-0350#B	The IMS shall provide the capability for authorized personnel to add, delete, or modify ECS metadata entries, individually or in groups.		S-IOS-00050	A	Advertising accesses to data shall be subject to access controls of read, write, update and delete, singly or in combination, based on user privileges.
			S-IOS-00230	A	The ADSRV CI shall provide the capability to add, delete, or modify individual Advertisements.
			S-IOS-00390	A	Advertising data accesses shall be subject to access controls of read, write, update and delete, singly or in combination, based on data types.
			S-IOS-00400	A	Advertising data accesses shall be subject to access controls of read, write, update and delete, singly or in combination, based on data ownership.
			S-DSS-00950	A	The SDSRV CI shall support the processing of Data Requests subject to access controls of read, write, update and delete, singly or in a any combination, based on data types.
			S-DSS-00960	A	The SDSRV CI shall support the processing of Data Requests subject to access controls of read, write, update and delete, singly or in a any combination, based on data ownership.
			S-DSS-00970	A	The SDSRV CI shall provide the capabilities to add, delete, or modify ECS Metadata to authorized users only.
			S-DSS-04570	A	The SDSRV CI shall provide services to add to the existing Inventory
			S-DSS-04580	A	The SDSRV CI shall provide services to delete from the existing Inventory
			S-DSS-04590	A	The SDSRV CI shall provide services to modify the existing Inventory
			S-DSS-10051	A	The DDSRV CI shall provide the capability to add, delete, or modify individual ECS Metadata entries.
			S-DSS-10080	A	The DDSRV CI shall provide the capability to add, delete, or modify groups of ECS Metadata entries.
			S-DMS-00540	B	The LIMGR CI data accesses shall be subject to read access controls based on data types, user privileges, and data ownership.
			S-DMS-10600	B	The DIMGR CI data accesses shall be subject to read access control based on user privileges.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-20220	B	The DDICT CI data accesses shall be subject to access controls of read, write, update and delete, singly or in combination, based on user privileges.
			S-DMS-20670	B	The DDICT CI shall establish access controls of read, write, update and delete, singly or in combination, based on data types.
			S-DMS-20680	B	The DDICT CI shall establish access controls of read, write, update and delete, singly or in combination, based on data ownership.
			S-DMS-20690	B	The DDICT CI shall provide the capability to add, delete, or modify dictionary entries to authorized users.
			S-DMS-20890	B	The DDICT CI shall provide maintain Valid Values for data elements, where the data element has an enumerated set of values as a constraint.
IMS-0355#A	The metadata shall be expandable to include additional attributes which are identified during the mission and deemed useful for data search.		S-DSS-00560	A	The SDSRV CI shall provide the capability for operations staff to create Schema Information.
IMS-0355#B	The metadata shall be expandable to include additional attributes which are identified during the mission and deemed useful for data search.		S-DSS-00560	A	The SDSRV CI shall provide the capability for operations staff to create Schema Information.
			S-DMS-00270	B	The LIMGR CI shall support revisions of its local Schema following Schema changes in the Data Servers represented in the LIMs local Schema.
			S-DMS-00280	B	The LIMGR CI shall provide a data administration utility for adding, deleting, modifying, and expanding individual Schema.
			S-DMS-10150	B	The DIMGR CI shall support revisions of its federated Schema following Schema changes in the LIMs represented in the DIM's federated Schema.
			S-DMS-10240	B	The DIMGR CI shall provide a data administration utility for adding, deleting, modifying, and expanding an individual Schema.
IMS-0356#A	The IMS shall provide a mechanism to create and update directory entries on EOSDIS data sets and forward directory entries in the appropriate format to the Global Change Master Directory.		S-DSS-03365	A	The SDSRV CI shall supply metadata on collections to the global master change directory in directory interchange format.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-0356#B	The IMS shall provide a mechanism to create and update directory entries on EOSDIS data sets and forward directory entries in the appropriate format to the Global Change Master Directory.		S-IOS-00230	A	The ADSRV CI shall provide the capability to add, delete, or modify individual Advertisements.
			S-DSS-03365	A	The SDSRV CI shall supply metadata on collections to the global master change directory in directory interchange format.
IMS-0360#A	The IMS shall maintain or provide access to an on-line Earth Science master directory of information, which may be geographically distributed, that describes whole data sets in the Earth science disciplines.		S-IOS-00030	A	Advertising shall contain information that describes EOSDIS science data sets.
			S-DSS-00450	A	The SDSRV CI shall provide Advertisements that indicate the class of data available from the Data Server.
			S-DSS-00460	A	The SDSRV CI shall provide Advertisements that indicate the services available from the Data Server.
			S-IOS-00870	A	The ADSRV CI shall support submission of advertisements in <TBD> format.
IMS-0360#B	The IMS shall maintain or provide access to an on-line Earth Science master directory of information, which may be geographically distributed, that describes whole data sets in the Earth science disciplines.		S-IOS-00030	A	Advertising shall contain information that describes EOSDIS science data sets.
			S-DSS-00450	A	The SDSRV CI shall provide Advertisements that indicate the class of data available from the Data Server.
			S-DSS-00460	A	The SDSRV CI shall provide Advertisements that indicate the services available from the Data Server.
			S-IOS-00870	A	The ADSRV CI shall support submission of advertisements in <TBD> format.
			S-DMS-00750	B	The LIMGR CI shall have the capability of creating, editing and deleting advertisements about itself and submitting them to the Advertising Service.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-0380#A	The IMS shall provide the capability to exchange directory data with IP data centers, ADCs, and selected ODCs.	A: Need one-way interoperability with NOAA-SAA. For TRMM support end-to-end testing and fault isolation.	S-IOS-00070	A	The ADSRV CI shall provide capability for displaying Advertisements for data and services provided by non-ECS systems with which ECS is interoperable.
			S-IOS-00080	A	The ADSRV CI shall provide a capability to access Advertisements for ECS and non-ECS data and services.
			S-IOS-00840	A	The ADSRV shall have the capability to receive Advertising information from the NOAA SAAs.
IMS-0380#B	The IMS shall provide the capability to exchange directory data with IP data centers, ADCs, and selected ODCs.	B: ASTER GDS interfaces to EDC DAAC only.	S-IOS-00070	A	The ADSRV CI shall provide capability for displaying Advertisements for data and services provided by non-ECS systems with which ECS is interoperable.
			S-IOS-00080	A	The ADSRV CI shall provide a capability to access Advertisements for ECS and non-ECS data and services.
			S-IOS-00840	A	The ADSRV shall have the capability to receive Advertising information from the NOAA SAAs.
IMS-0390#A	The IMS shall maintain or provide access to directory entries for all data sets accessible through the IMS search and order service.		S-CLS-10015	A	The WKBCH CI shall provide the capability for users to compose Directory Searches based on core metadata attributes.
			S-CLS-10755	A	The WKBCH CI shall provide users a search and results interface to search for and view Directory information.
			S-DMS-30505	A	The GTWAY CI shall provide for the return of Service Requests results.
			S-DMS-30500	A	The GTWAY CI shall provide for the submission of Service Requests.
IMS-0390#B	The IMS shall maintain or provide access to directory entries for all data sets accessible through the IMS search and order service.		S-CLS-10660	A	The WKBCH CI shall provide users the capability to access Advertisements.
			S-CLS-10680	A	The WKBCH CI shall provide users the capability to access descriptions of providers in the advertising service.
			S-DMS-00750	B	The LIMGR CI shall have the capability of creating, editing and deleting advertisements about itself and submitting them to the Advertising Service.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-0410#A	The IMS shall maintain an on-line guide (documentation /reference material) that provides information about individual EOIS data sets.		S-DSS-10010	A	The guide shall be maintained on-line by the DDSRV CI.
			S-DSS-10070	A	The DDSRV CI shall store, maintain and provide data management services for ECS guide (documentation/reference material).
IMS-0410#B	The IMS shall maintain an on-line guide (documentation /reference material) that provides information about individual EOIS data sets.		S-DSS-10010	A	The guide shall be maintained on-line by the DDSRV CI.
			S-DSS-10095	A	The DDSRV CI shall be capable of receiving data from the PLANG CI.
			S-CLS-11285	B	The WKBCH CI shall provide users the capability to create documents in HTML format.
IMS-0415#A	The IMS shall provide the ability to access and present (dependent on the user's display device capabilities) guide information which includes graphics and hypertext, derivable from suitably structured documents, as well as plain text documents.	A: GUI	S-CLS-10840	A	The WKBCH CI shall provide the ability for terminals with HTML viewers to access guide information in HTML format which includes graphics and hypertext.
			S-CLS-13690	A	Users shall be able to navigate through guide documentation in a hyper-text fashion, where guide documentation has been created in the appropriate format.
			S-CLS-10830	A	The WKBCH CI shall provide the capability to access and present guide information as ASCII text documents.
			S-CLS-13300	A	The WKBCH CI shall provide users the capability to access text information as plain text documents for dumb terminals.
IMS-0415#B	The IMS shall provide the ability to access and present (dependent on the user's display device capabilities) guide information which includes graphics and hypertext, derivable from suitably structured documents, as well as plain text documents.		S-CLS-10840	A	The WKBCH CI shall provide the ability for terminals with HTML viewers to access guide information in HTML format which includes graphics and hypertext.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-13690	A	Users shall be able to navigate through guide documentation in a hyper-text fashion, where guide documentation has been created in the appropriate format.
			S-CLS-10830	A	The WKBCH CI shall provide the capability to access and present guide information as ASCII text documents.
			S-CLS-13300	A	The WKBCH CI shall provide users the capability to access text information as plain text documents for dumb terminals.
IMS-0420#A	<p>The IMS on-line guide (documentation /reference material) shall provide or, where appropriate, contain references to such information as:</p> <ul style="list-style-type: none"> a. Documentation of processing algorithms used for EOS and other Earth science data products generated by the ECS b. Results of science data quality assessments of EOS data c. Bibliography of published and unpublished literature (as available) derived from the project d. Cross references between differing studies of the same data e. Other documents relevant to quality assessment of EOS data f. Product specifications g. Instrument specifications h. Summaries of data sets derived from observation logs i. Format options available for the given data set j. Subsetting, subsampling, and transformation options available for the given data set k. Inventory search options available for the given data set 	A: as applicable to the data set	S-DSS-03770	A	The SDSRV CI Schema Information shall include for each Data Type the services available for that Data Type.
			S-DSS-10090	A	The DDSRV CI shall be capable of receiving documentation of processing algorithms used for EOS and other Earth Science Data Products generated by the ECS

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-10100	A	The DDSRV CI shall be capable of receiving references to results of science data quality assessments of EOS data
			S-DSS-10110	A	The DDSRV CI shall be capable of receiving bibliography information of published and unpublished literature (as available) derived from the project
			S-DSS-10120	A	The DDSRV CI shall be capable of providing cross references between differing studies of the same data
			S-DSS-10130	A	The DDSRV CI shall be capable of receiving other documents relevant to quality assessment of EOS data
			S-DSS-10140	A	The DDSRV CI shall provide the capability to receive data describing format and media options available for a given data set.
			S-DSS-10150	A	The DDSRV CI shall be capable of receiving instrument specifications
			S-DSS-10160	A	The DDSRV CI shall provide the capability to receive summaries of data sets derived from observation logs
			S-DSS-10180	A	The DDSRV CI shall provide the capability to receive data describing subsetting, subsampling, and transformation options available for a given data set.
			S-DSS-10250	A	Upon receipt and successful storage of all supported document formats and descriptive data, the DDSRV CI shall provide access to the document and/or data.
			S-DSS-10241	A	Upon receipt of all supported document formats and descriptive data, the DDSRV CI shall provide storage for the document and descriptive data.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-0420#B	<p>The IMS on-line guide (documentation /reference material) shall provide or, where appropriate, contain references to such information as:</p> <ul style="list-style-type: none"> a. Documentation of processing algorithms used for EOS and other Earth science data products generated by the ECS b. Results of science data quality assessments of EOS data c. Bibliography of published and unpublished literature (as available) derived from the project d. Cross references between differing studies of the same data e. Other documents relevant to quality assessment of EOS data f. Product specifications g. Instrument specifications h. Summaries of data sets derived from observation logs i. Format options available for the given data set j. Subsetting, subsampling, and transformation options available for the given data set k. Inventory search options available for the given data set 		S-DSS-03770	A	The SDSRV CI Schema Information shall include for each Data Type the services available for that Data Type.
			S-DSS-10090	A	The DDSRV CI shall be capable of receiving documentation of processing algorithms used for EOS and other Earth Science Data Products generated by the ECS
			S-DSS-10100	A	The DDSRV CI shall be capable of receiving references to results of science data quality assessments of EOS data
			S-DSS-10110	A	The DDSRV CI shall be capable of receiving bibliography information of published and unpublished literature (as available) derived from the project
			S-DSS-10120	A	The DDSRV CI shall be capable of providing cross references between differing studies of the same data
			S-DSS-10130	A	The DDSRV CI shall be capable of receiving other documents relevant to quality assessment of EOS data

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-10140	A	The DDSRV CI shall provide the capability to receive data describing format and media options available for a given data set.
			S-DSS-10150	A	The DDSRV CI shall be capable of receiving instrument specifications
			S-DSS-10160	A	The DDSRV CI shall provide the capability to receive summaries of data sets derived from observation logs
			S-DSS-10180	A	The DDSRV CI shall provide the capability to receive data describing subsetting, subsampling, and transformation options available for a given data set.
			S-DSS-10250	A	Upon receipt and successful storage of all supported document formats and descriptive data, the DDSRV CI shall provide access to the document and/or data.
			S-DSS-10241	A	Upon receipt of all supported document formats and descriptive data, the DDSRV CI shall provide storage for the document and descriptive data.
			S-DSS-10095	A	The DDSRV CI shall be capable of receiving data from the PLANG CI.
			S-DSS-10055	B	The DDSRV CI shall provide, to qualified users, access to all documents and data types held in the server's collection.
IMS-0430#A	The IMS shall maintain an on-line inventory with information that individually describes each granule of EOSDIS data, where granule refers to the minimum traceable logical unit of data stored in the archives, as defined by the instrument science team.		S-CLS-10750	A	The WKBCH CI shall provide users a search and results interface to search for and view Inventory information.
			S-DSS-00450	A	The SDSRV CI shall provide Advertisements that indicate the class of data available from the Data Server.
			S-DSS-00460	A	The SDSRV CI shall provide Advertisements that indicate the services available from the Data Server.
			S-DSS-03390	A	The SDSRV CI shall update the Inventory after the Data it received for insertion into its data holdings have passed the validity checks applicable to the respective data types.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-0430#B	The IMS shall maintain an on-line inventory with information that individually describes each granule of EOSDIS data, where granule refers to the minimum traceable logical unit of data stored in the archives, as defined by the instrument science team.		S-CLS-10750	A	The WKBCI CI shall provide users a search and results interface to search for and view Inventory information.
			S-DSS-00450	A	The SDSRV CI shall provide Advertisements that indicate the class of data available from the Data Server.
			S-DSS-00460	A	The SDSRV CI shall provide Advertisements that indicate the services available from the Data Server.
			S-DSS-03390	A	The SDSRV CI shall update the Inventory after the Data it received for insertion into its data holdings have passed the validity checks applicable to the respective data types.
IMS-0440#A	The IMS shall maintain information that describes spacecraft housekeeping and ancillary data parameters stored in the archives.		S-DSS-10210	A	The DDSRV CI shall receive information that describes spacecraft-housekeeping and Ancillary Data parameters stored in the Science Data Server.
IMS-0440#B	The IMS shall maintain information that describes spacecraft housekeeping and ancillary data parameters stored in the archives.		S-DSS-10210	A	The DDSRV CI shall receive information that describes spacecraft-housekeeping and Ancillary Data parameters stored in the Science Data Server.
IMS-0450#A	The IMS shall accept and validate new and updated metadata for all ECS archive data which has been ingested at the DADS.		S-DSS-00150	A	The SDSRV CI shall accept and process Insert Metadata Requests to insert Metadata into the Inventory.
			S-DSS-04640	A	The SDSRV CI shall provide services to retrieve Metadata from the Inventory.
			S-DSS-04520	A	The SDSRV CI shall provide the capability to validate metadata before insertion into the Inventory.
			S-DSS-04530	A	The SDSRV CI shall provide the capability to validate updated metadata before insertion into the Inventory.
			S-DSS-04540	A	The SDSRV CI shall reject metadata which fails one or more validations constraints.
			S-DSS-03170	A	The SDSRV CI shall be capable of receiving validated Inventory Data.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-03740	A	The SDSRV CI shall provide storage for validated Inventory data.
IMS-0450#B	The IMS shall accept and validate new and updated metadata for all ECS archive data which has been ingested at the DADS.		S-DSS-00150	A	The SDSRV CI shall accept and process Insert Metadata Requests to insert Metadata into the Inventory.
			S-DSS-04640	A	The SDSRV CI shall provide services to retrieve Metadata from the Inventory.
			S-DSS-03410	B	The SDSRV CI shall verify compliance of scientist provided Metadata with EOSDIS defined standards for Metadata content and structure (not scientific content).
			S-DSS-04520	A	The SDSRV CI shall provide the capability to validate metadata before insertion into the Inventory.
			S-DSS-04530	A	The SDSRV CI shall provide the capability to validate updated metadata before insertion into the Inventory.
			S-DSS-04540	A	The SDSRV CI shall reject metadata which fails one or more validations constraints.
			S-DSS-03740	A	The SDSRV CI shall provide storage for validated Inventory data.
IMS-0455#A	The IMS shall accept and validate new metadata from the DADS reflecting changes as a result of: b. Transfers c. Unexpected loss d. Restoration of data after recovery from loss		S-DSS-04600	A	The SDSRV CI shall update the Metadata for a data item whenever an unexpected loss occurs.
			S-DSS-04610	A	The SDSRV CI shall update the Metadata whenever a data item is updated.
IMS-0455#B	The IMS shall accept and validate new metadata from the DADS reflecting changes as a result of: a. Purges b. Transfers c. Unexpected loss d. Restoration of data after recovery from loss		S-DSS-04600	A	The SDSRV CI shall update the Metadata for a data item whenever an unexpected loss occurs.
			S-DSS-04610	A	The SDSRV CI shall update the Metadata whenever a data item is updated.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-03410	B	The SDSRV CI shall verify compliance of scientist provided Metadata with EOSDIS defined standards for Metadata content and structure (not scientific content).
IMS-0460#A	The IMS shall provide the capability to accept metadata problem reports from users, and inform the PGS quality assurance staff of the problem.		S-CLS-10850	A	The WKBCH CI shall provide users the capability to submit Metadata problem reports.
			S-DSS-00720	A	The SDSRV CI shall accept Metadata Problem Reports.
IMS-0460#B	The IMS shall provide the capability to accept metadata problem reports from users, and inform the PGS quality assurance staff of the problem.		S-CLS-10850	A	The WKBCH CI shall provide users the capability to submit Metadata problem reports.
			S-DSS-00720	A	The SDSRV CI shall accept Metadata Problem Reports.
			S-DSS-00730	B	The SDSRV CI shall provide the capability to store Metadata problem reports.
			S-DSS-00740	B	The SDSRV CI shall notify operations staff of the receipt of Metadata problem reports.
			S-DSS-00750	B	The SDSRV CI shall provide Metadata problem reports to operations staff upon request.
IMS-0480#A	The IMS shall allow the user to store documents in the ECS.	A: electronic	S-CLS-12900	A	The WKBCH CI shall provide users a capability to store documents at his local workstation.
			S-DSS-10170	A	The DDSRV CI shall receive user supplied documents in HTML & ASCII
			S-DSS-10200	A	The DDSRV CI shall provide the capability to ingest documentation in ASCII text format.
			S-DSS-10204	A	The DDSRV CI shall provide the capability to ingest documentation in HTML format.
			S-DSS-04476	A	The DDSRV CI shall provide the ability to store documents and/or data.
			S-DSS-10241	A	Upon receipt of all supported document formats and descriptive data, the DDSRV CI shall provide storage for the document and descriptive data.
			S-DSS-10209	A	The DDSRV CI shall provide the capability to ingest documentation in Postscript format.
			S-CLS-12906	A	The WKBCH CI shall provide users a capability to print documents at his local workstation.
			S-CLS-12903	A	The WKBCH CI shall provide users a capability to save documents at his local workstation.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-0480#B	The IMS shall allow the user to store documents in the ECS.		S-CLS-12900	A	The WKBCH CI shall provide users a capability to store documents at his local workstation.
			S-DSS-10170	A	The DDSRV CI shall receive user supplied documents in HTML & ASCII
			S-DSS-10200	A	The DDSRV CI shall provide the capability to ingest documentation in ASCII text format.
			S-DSS-10204	A	The DDSRV CI shall provide the capability to ingest documentation in HTML format.
			S-DSS-04476	A	The DDSRV CI shall provide the ability to store documents and/or data.
			S-DSS-10241	A	Upon receipt of all supported document formats and descriptive data, the DDSRV CI shall provide storage for the document and descriptive data.
			S-DSS-10209	A	The DDSRV CI shall provide the capability to ingest documentation in Postscript format.
			S-DSS-10202	B	The DDSRV CI shall provide the capability to ingest documentation in Microsoft WORD format.
			S-DSS-10206	B	The DDSRV CI shall provide the capability to ingest documentation in Interleaf format.
			S-DSS-10208	B	The DDSRV CI shall provide the capability to ingest documentation in WordPerfect format.
			S-CLS-12906	A	The WKBCH CI shall provide users a capability to print documents at his local workstation.
			S-CLS-12903	A	The WKBCH CI shall provide users a capability to save documents at his local workstation.
			S-CLS-12908	B	The WKBCH CI shall provide users a capability to submit documents to the guide.
IMS-0490#A	The IMS shall provide the capability to ingest documentation in a number of digital text formats, at a minimum the following: a. ASCII text b. Microsoft WORD c. HTML d. Interleaf e. Postscript f. WordPerfect		S-DSS-10200	A	The DDSRV CI shall provide the capability to ingest documentation in ASCII text format.
			S-DSS-10204	A	The DDSRV CI shall provide the capability to ingest documentation in HTML format.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-10209	A	The DDSRV CI shall provide the capability to ingest documentation in Postscript format.
IMS-0490#B	The IMS shall provide the capability to ingest documentation in a number of digital text formats, at a minimum the following: a. ASCII text b. Microsoft WORD c. HTML d. Interleaf e. Postscript f. WordPerfect		S-DSS-10200	A	The DDSRV CI shall provide the capability to ingest documentation in ASCII text format.
			S-DSS-10204	A	The DDSRV CI shall provide the capability to ingest documentation in HTML format.
			S-DSS-10209	A	The DDSRV CI shall provide the capability to ingest documentation in Postscript format.
			S-DSS-10202	B	The DDSRV CI shall provide the capability to ingest documentation in Microsoft WORD format.
			S-DSS-10206	B	The DDSRV CI shall provide the capability to ingest documentation in Interleaf format.
			S-DSS-10208	B	The DDSRV CI shall provide the capability to ingest documentation in WordPerfect format.
			S-CLS-12908	B	The WKBCH CI shall provide users a capability to submit documents to the guide.
IMS-0500#A	The IMS shall provide access to information to include at a minimum: a. Metadata b. Spacecraft housekeeping and ancillary data information f. Processing schedules g. Documentation i. Science Processing Library software j. Documentation on data format and metadata standards		S-CLS-10720	A	Registered users shall be able to obtain ECS data and services via their corresponding interfaces in the WKBCH CI, provided that the users are authorized for the specific services and/or data.
			S-CLS-10750	A	The WKBCH CI shall provide users a search and results interface to search for and view Inventory information.
			S-CLS-10840	A	The WKBCH CI shall provide the ability for terminals with HTML viewers to access guide information in HTML format which includes graphics and hypertext.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-10830	A	The WKBCH CI shall provide the capability to access and present guide information as ASCII text documents.
			S-CLS-13300	A	The WKBCH CI shall provide users the capability to access text information as plain text documents for dumb terminals.
			S-CLS-10620	A	The WKBCH CI shall provide users the capability to view documentation ingested in any of the following document formats: a) PostScript, b) ASCII, c) Hypertext Markup Language (HTML), d) Microsoft Word, e) WordPerfect, f) Adobe Acrobat Portable Document Format (PDF), g) Interleaf.
IMS-0500#B	The IMS shall provide access to information to include at a minimum: a. Metadata b. Spacecraft housekeeping and ancillary data information c. Engineering data d. EOC historical data e. Data acquisition plans and schedules f. Processing schedules g. Documentation h. ESDIS Project Policies and Procedures obtained from SMC data base i. Science Processing Library software j. Documentation on data format and metadata standards		S-CLS-10720	A	Registered users shall be able to obtain ECS data and services via their corresponding interfaces in the WKBCH CI, provided that the users are authorized for the specific services and/or data.
			S-CLS-10750	A	The WKBCH CI shall provide users a search and results interface to search for and view Inventory information.
			S-CLS-10840	A	The WKBCH CI shall provide the ability for terminals with HTML viewers to access guide information in HTML format which includes graphics and hypertext.
			S-CLS-10830	A	The WKBCH CI shall provide the capability to access and present guide information as ASCII text documents.
			S-DSS-10238	A	The DDSRV CI shall provide storage for production plan data.
			S-CLS-10200	B	The WKBCH CI shall provide users the capability to search and view a products processing history.
			S-CLS-10210	B	The WKBCH CI shall provide users the capability to search for Science Processing Library holdings

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-10730	B	The WKBCH CI shall provide users the capability to search data dictionary information to obtain the precise definitions of terms used within ECS.
			S-CLS-10870	B	The WKBCH CI shall provide users the capability to display data acquisition plans and schedules.
			S-CLS-10880	B	The WKBCH CI shall provide users the capability to display documentation on data formats and Metadata standards.
			S-CLS-10890	B	The WKBCH CI shall provide users the capability to display ESDIS Project Policies and Procedures.
			S-CLS-13930	B	The WKBCH CI shall be expandable to make accessible to authorized users the current data acquisition schedules and plans for U.S. instruments on foreign spacecraft for the IP Information Management System or an equivalent IP facility.
			S-CLS-13300	A	The WKBCH CI shall provide users the capability to access text information as plain text documents for dumb terminals.
			S-CLS-10620	A	The WKBCH CI shall provide users the capability to view documentation ingested in any of the following document formats: a) PostScript, b) ASCII, c) Hypertext Markup Language (HTML), d) Microsoft Word, e) WordPerfect, f) Adobe Acrobat Portable Document Format (PDF), g) Interleaf.
IMS-0510#A	<p>The IMS shall provide tools for research planning and data search, to include at a minimum:</p> <ul style="list-style-type: none"> a. Data acquisition schedules and plans b. The capability to map specified geophysical parameters to the appropriate instrument and/or Standard Product c. Descriptive information on instruments and geophysical parameters available in Standard Products d. Climatology information f. Geographic reference aids g. Spacecraft location projections. 		S-CLS-10840	A	The WKBCH CI shall provide the ability for terminals with HTML viewers to access guide information in HTML format which includes graphics and hypertext.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-0510#B	The IMS shall provide tools for research planning and data search, to include at a minimum: a. Data acquisition schedules and plans b. The capability to map specified geophysical parameters to the appropriate instrument and/or Standard Product c. Descriptive information on instruments and geophysical parameters available in Standard Products d. Climatology information f. Geographic reference aids g. Spacecraft location projections.		S-CLS-13710	A	The WKBCH CI shall provide users the capability to display on a coverage map the geographic coverage of Data Granules.
			S-CLS-13970	A	The WKBCH CI shall provide users the capability to display the Workbench selection map in either a flat equatorial projection, or north or south polar projections.
			S-CLS-10840	A	The WKBCH CI shall provide the ability for terminals with HTML viewers to access guide information in HTML format which includes graphics and hypertext.
			S-CLS-10830	A	The WKBCH CI shall provide the capability to access and present guide information as ASCII text documents.
			S-CLS-10870	B	The WKBCH CI shall provide users the capability to display data acquisition plans and schedules.
			S-CLS-13700	B	Overlays provided for display to users shall be continuous over the entire display area, regardless of any gaps in the science data, for data following HDF-EOS geolocation conventions.
			S-CLS-13930	B	The WKBCH CI shall be expandable to make accessible to authorized users the current data acquisition schedules and plans for U.S. instruments on foreign spacecraft for the IP Information Management System or an equivalent IP facility.
			S-CLS-14400	B	Time-related data for DARs shall be synchronized so that selection of a time range on a DAR timeline tool will be translated into date/time ranges in a DAR submission window.
			S-CLS-14410	B	Time-related data for DARs shall be synchronized so that typing a date/time range in a DAR submission window will be graphically display as a blocked out time range on a DAR timeline window.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-14420	B	Geographic selection criteria for DARs shall be synchronized so that selection of an area on a DAR map display will be translated into lat/lon coordinates in a DAR submissions window.
			S-CLS-14430	B	Geographic selection criteria for DARs shall be synchronized so that typing lat/lon coordinates in a DAR submission window will be graphically displayed as a blocked out area on a DAR map display.
			S-CLS-14480	B	Time-related data for a Product Request shall be synchronized so that selection of a time range on a Product Request timeline tool will be translated into date/time ranges in a Product Request submission window.
			S-CLS-14490	B	Time-related data for a Product Request shall be synchronized so that a date/time range typed in a Product Request window will be graphically display as a blocked out time range on a Product Request timeline window.
			S-CLS-14500	B	Geographic selection criteria for a Product Request shall be synchronized so that selection of an area on a Product Request map display will be translated into lat/lon coordinates in a Product Request submissions window.
			S-CLS-14510	B	Geographic selection criteria for a DAR shall be synchronized so that typed lat/lon coordinates in a Product Request submission window will be graphically displayed as a blocked out area on a Product Request map display.
			S-DMS-20920	B	The DDICT CI shall provide the capability to relate Phenomenological Search Criteria to Search Criteria containing values for searchable attributes supported in the Data Server Schema.
			S-DMS-20006	B	The DDICT CI shall store a mapping of geophysical parameters to the appropriate instruments and collections.
			S-DMS-20007	B	The DDICT CI shall provide the capability to search a mapping of geophysical parameters to the appropriate instruments and collections.
			S-DMS-20008	B	The DDICT CI shall store descriptive information about keywords associated with a collection, including at a minimum instruments and geophysical parameters.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-20009	B	The DDICT CI shall provide the capability to search descriptive information about keywords associated with a collection, including at a minimum instruments and geophysical parameters.
			S-CLS-10300	B	The WKBCH CI shall provide visual overlays to aid in the selection of spatial data and to enhance the display of geographic metadata.
			S-CLS-13860	B	The WKBCH CI shall provide EOS-AM spacecraft location projections as a reference aid to the creation of ASTER Data Acquisition Requests
			S-CLS-10882	B	The WKBCH CI shall provide users the capability to display climatology information.
			S-CLS-10884	B	The WKBCH CI shall provide users the capability to display geographic reference aids.
IMS-0530#A	The IMS shall provide document text search.		S-IOS-00610	A	The ADSRV CI shall find Advertisements which match text string expressions in the Service Request
IMS-0530#B	The IMS shall provide document text search.		S-IOS-00610	A	The ADSRV CI shall find Advertisements which match text string expressions in the Service Request
			S-CLS-10770	A	The WKBCH CI shall support hierarchical searching of documents in HTML format.
IMS-0535#A	The IMS shall support hierarchical searching of suitably structured documents.		S-DSS-10030	A	The DDSRV CI shall support storage, retrieval and searching of documents in HTML format.
IMS-0535#B	The IMS shall support hierarchical searching of suitably structured documents.		S-DSS-10030	A	The DDSRV CI shall support storage, retrieval and searching of documents in HTML format.
			S-DMS-20360	B	The DDICT CI shall provide documents conforming to HTML3 standards.
			S-CLS-10770	A	The WKBCH CI shall support hierarchical searching of documents in HTML format.
IMS-0540#B	The IMS shall display PGS system processing schedules to users.		S-CLS-10860	B	The WKBCH CI shall provide users the capability to display processing schedules.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-10620	A	The WKBCH CI shall provide users the capability to view documentation ingested in any of the following document formats: a) PostScript, b) ASCII, c) Hypertext Markup Language (HTML), d) Microsoft Word, e) WordPerfect, f) Adobe Acrobat Portable Document Format (PDF), g) Interleaf.
IMS-0545#B	The IMS shall provide the capability to search a products processing history.		S-DSS-04670	A	The SDSRV CI shall support Inventory searches based on the Core Inventory Metadata.
			S-CLS-10200	B	The WKBCH CI shall provide users the capability to search and view a products processing history.
			S-CLS-13550	B	The WKBCH CI shall provide users the capability to search Production History on any combination of Production History Metadata attributes.
			S-DSS-03210	A	The SDSRV CI shall be capable of receiving Production History and its associated metadata.
IMS-0550#A	The IMS shall allow a user to locate and identify desired data without detailed knowledge of the ECSs: a. Architecture b. Data Base management system c. Data Base structure d. Query languages e. Data formats		S-CLS-10030	A	The WKBCH CI shall provide graphical aids to assist users in formulating Search Requests.
			S-CLS-10710	A	The WKBCH CI shall provide the registered user the capability to obtain ECS data and services.
			S-CLS-10720	A	Registered users shall be able to obtain ECS data and services via their corresponding interfaces in the WKBCH CI, provided that the users are authorized for the specific services and/or data.
			S-CLS-10650	A	The WKBCH CI shall provide the user the capability to identify Data and services provided by ECS.
			S-CLS-10700	A	The WKBCH CI shall provide the user the capability to locate non-ECS data and services interoperable with ECS.
			S-CLS-10780	A	The WKBCH CI shall list Dependent Valid Values to assist users in formulating Search Requests.
			S-DSS-00023	A	The SDSRV CI shall perform services specified by Service Requests.
			S-DSS-03030	A	The SDSRV CI shall be capable of receiving Science Software Archive Packages.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-03040	A	The SDSRV CI shall be capable of receiving Metadata associated with Science Software Archive Packages.
			S-DSS-03250	A	The SDSRV CI shall be capable of receiving QA Statistics.
			S-DSS-03260	A	The SDSRV CI shall be capable of receiving Metadata associated with QA Statistics.
			S-DSS-03440	A	The SDSRV CI shall interface with the STMGT CI to provide storage for Science Software Archive Packages.
			S-DSS-03620	A	The SDSRV CI shall interface with the STMGT CI to provide storage for QA Statistics.
			S-DSS-04060	A	The SDSRV CI shall supply Science Software Archive Packages to the DDIST CI.
			S-DSS-04070	A	The SDSRV CI shall supply Metadata associated with Science Software Archive Packages to the DDIST CI.
			S-DSS-04160	A	The SDSRV CI shall supply inventory characteristic data to the DDIST CI.
			S-DSS-04200	A	The SDSRV CI shall supply Production History data to the DDIST CI.
			S-DSS-04210	A	The SDSRV CI shall supply Metadata associated with Production History data to the DDIST CI.
			S-DSS-04240	A	The SDSRV CI shall supply QA Statistics to the DDIST CI.
			S-DSS-04250	A	The SDSRV CI shall supply Metadata associated with QA Statistics to the DDIST CI.
			S-DSS-10060	A	The DDSRV CI shall provide access to the ECS guide (documentation/reference material) and guide services.
			S-DSS-00020	IR1	The SDSRV CI shall accept Service Requests from clients.
			S-DSS-03170	A	The SDSRV CI shall be capable of receiving validated Inventory Data.
			S-DSS-03366	A	The SDSRV CI shall be capable of receiving inventory characteristic data.
			S-DSS-03450	A	The SDSRV CI shall provide storage for Metadata associated with Science Software Archive Packages.
			S-DSS-03540	A	The SDSRV CI shall provide storage for inventory characteristic data.
			S-DSS-03580	A	The SDSRV CI shall interface with the STMGT CI to provide storage for Production History.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-03630	A	The SDSRV CI shall provide storage for Metadata associated with QA Statistics.
			S-DSS-03210	A	The SDSRV CI shall be capable of receiving Production History and its associated metadata.
IMS-0550#B	The IMS shall allow a user to locate and identify desired data without detailed knowledge of the ECSs: a. Architecture b. Data Base management system c. Data Base structure d. Query languages e. Data formats		S-CLS-10030	A	The WKBCH CI shall provide graphical aids to assist users in formulating Search Requests.
			S-CLS-10710	A	The WKBCH CI shall provide the registered user the capability to obtain ECS data and services.
			S-CLS-10720	A	Registered users shall be able to obtain ECS data and services via their corresponding interfaces in the WKBCH CI, provided that the users are authorized for the specific services and/or data.
			S-CLS-10650	A	The WKBCH CI shall provide the user the capability to identify Data and services provided by ECS.
			S-CLS-10700	A	The WKBCH CI shall provide the user the capability to locate non-ECS data and services interoperable with ECS.
			S-CLS-10780	A	The WKBCH CI shall list Dependent Valid Values to assist users in formulating Search Requests.
			S-DSS-00023	A	The SDSRV CI shall perform services specified by Service Requests.
			S-DSS-03030	A	The SDSRV CI shall be capable of receiving Science Software Archive Packages.
			S-DSS-03040	A	The SDSRV CI shall be capable of receiving Metadata associated with Science Software Archive Packages.
			S-DSS-03250	A	The SDSRV CI shall be capable of receiving QA Statistics.
			S-DSS-03260	A	The SDSRV CI shall be capable of receiving Metadata associated with QA Statistics.
			S-DSS-03440	A	The SDSRV CI shall interface with the STMGT CI to provide storage for Science Software Archive Packages.
			S-DSS-03620	A	The SDSRV CI shall interface with the STMGT CI to provide storage for QA Statistics.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-04060	A	The SDSRV CI shall supply Science Software Archive Packages to the DDIST CI.
			S-DSS-04070	A	The SDSRV CI shall supply Metadata associated with Science Software Archive Packages to the DDIST CI.
			S-DSS-04160	A	The SDSRV CI shall supply inventory characteristic data to the DDIST CI.
			S-DSS-04200	A	The SDSRV CI shall supply Production History data to the DDIST CI.
			S-DSS-04210	A	The SDSRV CI shall supply Metadata associated with Production History data to the DDIST CI.
			S-DSS-04240	A	The SDSRV CI shall supply QA Statistics to the DDIST CI.
			S-DSS-04250	A	The SDSRV CI shall supply Metadata associated with QA Statistics to the DDIST CI.
			S-DSS-10060	A	The DDSRV CI shall provide access to the ECS guide (documentation/reference material) and guide services.
			S-CLS-10010	B	The WKBCH CI shall provide the capability for users to compose Search Requests based on product specific and core metadata attributes.
			S-CLS-11290	B	The WKBCH CI shall provide a capability to translate user input Search Criteria into ECS internal query language.
			S-DMS-00040	B	The LIMGR CI shall determine which Data Servers are required in order to perform a Search Request and build a Site Query Plan as a result.
			S-DMS-00050	B	The LIMGR CI shall initiate data provider data access and manipulation operations.
			S-DMS-00180	B	The LIMGR CI shall support interactive information management capabilities for administrators to retrieve information.
			S-DMS-10010	B	The DIMGR CI shall provide capabilities to search and obtain data across DAACs.
			S-DMS-10020	B	The DIMGR CI shall accept and execute Search Requests which require searching across DAACs.
			S-DMS-10030	B	The DIMGR CI shall compare received Search Requests to its federated Schema to determine to which LIMs or Data Servers the Search Request must be forwarded and generate a Distributed Query Plan.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-10040	B	Upon determining which LIMs are required to complete a Search Request, the DIMGR CI shall send to the requisite LIMs the portions of the original Search Request which apply to them.
			S-DMS-10060	B	The DIMGR CI shall compile and manage the results of the Distributed Query Plan for the client which initiated it.
			S-DMS-10650	B	The DIMGR CI shall initiate distributed data access and manipulation operations.
			S-DMS-30140	B	The GTWAY CI shall provide the capability to suspend processing of active service requests.
			S-DMS-30150	B	The GTWAY CI shall provide the capability to resume processing of a previously suspended service request.
			S-DPS-21124	B	The PRONG CI shall receive advertisements from the IOS.
			S-DPS-21126	B	The PRONG CI shall send advertisement subscriptions to the IOS.
			S-DSS-01790	B	The SDSRV CI shall provide access to compound data type services.
			S-DSS-04180	B	The SDSRV CI shall supply Orbit/Attitude Data to the DDIST CI.
			S-DSS-04190	B	The SDSRV CI's MD Component shall supply Metadata associated with Orbit/Attitude Data to the DDIST CI.
			S-PLS-00604	B	The PLANG CI shall receive advertisements from the IOS.
			S-PLS-00606	B	The PLANG CI shall send advertisement subscriptions to the IOS.
			S-DSS-00020	IR1	The SDSRV CI shall accept Service Requests from clients.
			S-DMS-20010	B	The DDICT CI shall store a conceptual schema of the data held in the SDSRV, LIMGR, and DIMGR to hide the underlying database structure from the end user.
			S-DSS-03170	A	The SDSRV CI shall be capable of receiving validated Inventory Data.
			S-DSS-03450	A	The SDSRV CI shall provide storage for Metadata associated with Science Software Archive Packages.
			S-DSS-03540	A	The SDSRV CI shall provide storage for inventory characteristic data.
			S-DSS-03580	A	The SDSRV CI shall interface with the STMGT CI to provide storage for Production History.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-03630	A	The SDSRV CI shall provide storage for Metadata associated with QA Statistics.
			S-DSS-03210	A	The SDSRV CI shall be capable of receiving Production History and its associated metadata.
IMS-0560#B	The IMS shall decompose complex data base search requests into executable data base queries in a manner which is transparent to the user.		S-CLS-10010	B	The WKBCH CI shall provide the capability for users to compose Search Requests based on product specific and core metadata attributes.
			S-CLS-11290	B	The WKBCH CI shall provide a capability to translate user input Search Criteria into ECS internal query language.
			S-CLS-13560	B	The WKBCH CI shall allow users to search the holdings of ECS using Phenomenological Search Criteria for attributes supported by Data Server Schema.
			S-CLS-14570	B	The WKBCH CI shall provide users the capability to relate Phenomenological Search Criteria to Search Criteria containing values for searchable attributes supported in the Data Server Schema.
			S-DMS-00030	B	The LIMGR CI shall create an integrated schema from the exported schematas of the Data Servers.
			S-DMS-00040	B	The LIMGR CI shall determine which Data Servers are required in order to perform a Search Request and build a Site Query Plan as a result.
			S-DMS-00050	B	The LIMGR CI shall initiate data provider data access and manipulation operations.
			S-DMS-00060	B	The LIMGR CI shall provide the capability to establish a session as the context for a series of Service Requests.
			S-DMS-00070	B	The LIMGR CI shall provide the capability to suspend an ongoing session.
			S-DMS-00080	B	The LIMGR CI shall provide the capability to resume a suspended session.
			S-DMS-00090	B	The LIMGR CI shall provide the capability to terminate an established client session.
			S-DMS-00100	B	The LIMGR CI shall accept search results from a Data Server, and provide capability, to integrate Search Results from a previous Search Request.
			S-DMS-00110	B	The LIMGR CI shall provide the capability to save the result of a Service Request for later reuse.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-00120	B	The LIMGR CI shall, upon request, provide the current Result Set (complete or incomplete) to the client or specified destination.
			S-DMS-00130	B	The LIMGR CI shall provide the capability, to terminate processing of an active or suspended Service Request.
			S-DMS-00140	B	The LIMGR CI shall provide the capability, to suspend processing of an active Service Request.
			S-DMS-00150	B	The LIMGR CI shall provide the capability, to resume processing of a previously suspended Service Request.
			S-DMS-00160	B	The LIMGR CI shall provide the capability, to estimate the resources required to execute a pending Service Request.
			S-DMS-00230	B	The LIMGR CI shall provide the capability to integrate partial results within those Data Servers represented in its local Schema.
			S-DMS-00290	B	The LIMGR CI shall accept Service Requests, and provide capability, to find and retrieve a Schema entry from an integrated Schema.
			S-DMS-00550	B	The LIMGR CI shall provide a capability to decompose the Search Requests it receives into executable data base Queries.
			S-DMS-10020	B	The DIMGR CI shall accept and execute Search Requests which require searching across DAACs.
			S-DMS-10030	B	The DIMGR CI shall compare received Search Requests to its federated Schema to determine to which LIMs or Data Servers the Search Request must be forwarded and generate a Distributed Query Plan.
			S-DMS-10050	B	The DIMGR CI shall monitor the progress of the Distributed Query Plan.
			S-DMS-10060	B	The DIMGR CI shall compile and manage the results of the Distributed Query Plan for the client which initiated it.
			S-DMS-10070	B	The DIMGR CI shall execute, monitor, and compile plan results without continuous connection with the client this capability shall allow the client to disconnect from and later reconnect to the DIM to retrieve the results.
			S-DMS-10110	B	The DIMGR CI shall provide the capability to integrate partial results from those LIMs represented in its federated Schema into a complete Result Set.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-10160	B	The DIMGR CI shall be able to receive the local Schema of LIMs in its federation from the LIM service.
			S-DMS-10170	B	The DIMGR CI shall create a union of the Schemata it receives from LIMs in its federation. This union is a federated Schema.
			S-DMS-10180	B	The DIMGR CI shall not alter the Schemata it receives from any LIM in creating the federated Schema.
			S-DMS-10190	B	The DIMGR CI shall subscribe to the LIMs for any changes in LIM Schemata.
			S-DMS-10200	B	The DIMGR CI shall subscribe to the Advertising service for any additions or deletions of LIMs from its federation.
			S-DMS-10210	B	The DIMGR CI shall be able to add a LIM to its federation based on the subscription notifications it receives from the Advertising service..
			S-DMS-10220	B	The DIMGR CI shall provide an interface whereby a LIM may be deleted from the federation based on the subscription notifications it receives from the Advertising service..
			S-DMS-10250	B	The distributed Schema administrator shall maintain the federated Schema in the DIM.
			S-DMS-10260	B	The DIMGR CI shall provide an interface to the DIM administrator client whereby a LIM may be added to the federation.
			S-DMS-10270	B	The DIMGR CI shall provide an interface to the DIM administrator client whereby a LIM may be deleted from the federation.
			S-DMS-10280	B	The DIMGR CI shall provide an interface to the DIM administrator client whereby a LIM may be replaced in the federation.
			S-DMS-10290	B	The DIMGR CI shall provide an interface to the DIM administrator client whereby LIM information may be retrieved from the federation.
			S-DMS-10300	B	The DIMGR CI shall provide the capability to find and retrieve a Schema entry from an distributed Schema.
			S-DMS-10650	B	The DIMGR CI shall initiate distributed data access and manipulation operations.
			S-DMS-10660	B	The DIMGR CI shall provide the capability establish a session as the context for a series of Service Requests.
			S-DMS-10670	B	The DIMGR CI shall provide the capability to suspend an ongoing session.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-10680	B	The DIMGR CI shall provide the capability to resume a suspended session.
			S-DMS-10690	B	The DIMGR CI shall provide the capability to terminate an established client session.
			S-DMS-10700	B	The DIMGR CI shall provide the capability to save the result of a Service Request for later reuse.
			S-DMS-10710	B	The DIMGR CI shall, upon request, provide the current Result Set (complete or incomplete) to the client or specified destination.
			S-DMS-10720	B	The DIMGR CI shall provide the capability, to terminate processing of an active or suspended Service Request.
			S-DMS-10730	B	The DIMGR CI shall provide the capability, to suspend processing of an active Service Request.
			S-DMS-10740	B	The DIMGR CI shall provide the capability, to resume processing of a previously suspended Service Request.
			S-DMS-10750	B	The DIMGR CI shall provide the capability to estimate resources required to execute a pending Service Request.
			S-DMS-20240	B	The DDICT CI shall provide a capability to decompose the Search Requests it receives into executable data base Queries.
			S-DMS-30060	B	The GTWAY CI shall provide the capability to establish sessions as the context for a series of service requests.
			S-DMS-30070	B	The GTWAY CI shall provide the capability to suspend an on-going session.
			S-DMS-30080	B	The GTWAY CI shall provide the capability to resume a previously suspended session.
			S-DMS-30090	B	The GTWAY CI shall provide the capability to terminate an established session.
			S-DMS-30120	B	The GTWAY CI shall, upon request, provide the current Result Set (complete or incomplete) to the client or specified destination.
			S-DMS-30130	B	The GTWAY CI shall provide the capability to terminate processing of active or suspended service requests.
			S-DMS-30140	B	The GTWAY CI shall provide the capability to suspend processing of active service requests.
			S-DMS-30150	B	The GTWAY CI shall provide the capability to resume processing of a previously suspended service request.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-30160	B	The GTWAY CI shall provide a capability to estimate the resources required to execute a pending Service request.
			S-DMS-00020	B	The LIMGR CI shall accept Search Requests in a format compatible with the Earth Science Query Language.
IMS-0570#A	The IMS shall provide an incremental search capability.		S-CLS-10020	A	The WKBCH CI shall provide users the capability to refine and resubmit a Search Request with additional, deleted, or changed Search Criteria.
IMS-0570#B	The IMS shall provide an incremental search capability.		S-CLS-10020	A	The WKBCH CI shall provide users the capability to refine and resubmit a Search Request with additional, deleted, or changed Search Criteria.
			S-CLS-12480	B	The WKBCH CI shall provide the capability to request any of the services available for the individual items in the output of a Metadata search.
			S-DMS-00115	B	The LIMGR CI shall support search requests against result sets from previous searches within the same session.
			S-DMS-10115	B	The DIMGR CI shall support search requests against result sets from previous searches within the same session.
IMS-0575#B	The IMS shall provide the capability to search across multiple data sets for coincident occurrences of data in space and/or time and any other attribute(s) of metadata.	B: DIM and LIM	S-CLS-10190	B	The WKBCH CI shall provide the capability for users to compose searches across multiple data sets for coincident occurrences of data in space, time, or any other searchable Metadata attribute(s).
			S-DMS-00550	B	The LIMGR CI shall provide a capability to decompose the Search Requests it receives into executable data base Queries.
			S-DMS-10030	B	The DIMGR CI shall compare received Search Requests to its federated Schema to determine to which LIMs or Data Servers the Search Request must be forwarded and generate a Distributed Query Plan.
			S-DMS-10040	B	Upon determining which LIMs are required to complete a Search Request, the DIMGR CI shall send to the requisite LIMs the portions of the original Search Request which apply to them.
			S-DMS-10060	B	The DIMGR CI shall compile and manage the results of the Distributed Query Plan for the client which initiated it.
			S-DMS-10160	B	The DIMGR CI shall be able to receive the local Schema of LIMs in its federation from the LIM service.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-10170	B	The DIMGR CI shall create a union of the Schemata it receives from LIMs in its federation. This union is a federated Schema.
			S-DMS-10180	B	The DIMGR CI shall not alter the Schemata it receives from any LIM in creating the federated Schema.
			S-DMS-10190	B	The DIMGR CI shall subscribe to the LIMs for any changes in LIM Schemata.
			S-DMS-10200	B	The DIMGR CI shall subscribe to the Advertising service for any additions or deletions of LIMs from its federation.
			S-DMS-10210	B	The DIMGR CI shall be able to add a LIM to its federation based on the subscription notifications it receives from the Advertising service..
			S-DMS-10220	B	The DIMGR CI shall provide an interface whereby a LIM may be deleted from the federation based on the subscription notifications it receives from the Advertising service..
			S-DMS-10250	B	The distributed Schema administrator shall maintain the federated Schema in the DIM.
			S-DMS-10260	B	The DIMGR CI shall provide an interface to the DIM administrator client whereby a LIM may be added to the federation.
			S-DMS-10270	B	The DIMGR CI shall provide an interface to the DIM administrator client whereby a LIM may be deleted from the federation.
			S-DMS-10280	B	The DIMGR CI shall provide an interface to the DIM administrator client whereby a LIM may be replaced in the federation.
			S-DMS-10290	B	The DIMGR CI shall provide an interface to the DIM administrator client whereby LIM information may be retrieved from the federation.
			S-DMS-10300	B	The DIMGR CI shall provide the capability to find and retrieve a Schema entry from an distributed Schema.
			S-DMS-10650	B	The DIMGR CI shall initiate distributed data access and manipulation operations.
			S-DMS-10660	B	The DIMGR CI shall provide the capability establish a session as the context for a series of Service Requests.
			S-DMS-10670	B	The DIMGR CI shall provide the capability to suspend an ongoing session.
			S-DMS-10680	B	The DIMGR CI shall provide the capability to resume a suspended session.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-10690	B	The DIMGR CI shall provide the capability to terminate an established client session.
			S-DMS-10700	B	The DIMGR CI shall provide the capability to save the result of a Service Request for later reuse.
			S-DMS-10710	B	The DIMGR CI shall, upon request, provide the current Result Set (complete or incomplete) to the client or specified destination.
			S-DMS-10720	B	The DIMGR CI shall provide the capability, to terminate processing of an active or suspended Service Request.
			S-DMS-10730	B	The DIMGR CI shall provide the capability, to suspend processing of an active Service Request.
			S-DMS-10740	B	The DIMGR CI shall provide the capability, to resume processing of a previously suspended Service Request.
			S-DMS-10750	B	The DIMGR CI shall provide the capability to estimate resources required to execute a pending Service Request.
			S-DMS-20240	B	The DDICT CI shall provide a capability to decompose the Search Requests it receives into executable data base Queries.
IMS-0580#A	The IMS shall provide geographic and geophysical (e.g. ocean bathymetry surface features) overlays to aid in the selection of spatial data and to enhance the display of metadata.		S-CLS-13570	A	The user shall be able to indicate a spatial search criterion by drawing a polygon on a displayed map overlay.
			S-CLS-13710	A	The WKBCH CI shall provide users the capability to display on a coverage map the geographic coverage of Data Granules.
			S-CLS-13720	A	Users shall be able to select Data Granules displayed on a coverage map for delivery.
			S-CLS-13970	A	The WKBCH CI shall provide users the capability to display the Workbench selection map in either a flat equatorial projection, or north or south polar projections.
			S-CLS-10350	A	The WKBCH CI shall provide users the option to display a series of Latitude/Longitude pairs as lines, displayed in their proper geolocation on top of all visualizations produced by the WKBCH CI.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-10300	B	The WKBCH CI shall provide visual overlays to aid in the selection of spatial data and to enhance the display of geographic metadata.
IMS-0580#B	The IMS shall provide geographic and geophysical (e.g. ocean bathymetry surface features) overlays to aid in the selection of spatial data and to enhance the display of metadata.		S-CLS-13570	A	The user shall be able to indicate a spatial search criterion by drawing a polygon on a displayed map overlay.
			S-CLS-13710	A	The WKBCH CI shall provide users the capability to display on a coverage map the geographic coverage of Data Granules.
			S-CLS-13720	A	Users shall be able to select Data Granules displayed on a coverage map for delivery.
			S-CLS-13970	A	The WKBCH CI shall provide users the capability to display the Workbench selection map in either a flat equatorial projection, or north or south polar projections.
			S-CLS-10350	A	The WKBCH CI shall provide users the option to display a series of Latitude/Longitude pairs as lines, displayed in their proper geolocation on top of all visualizations produced by the WKBCH CI.
			S-CLS-10070	B	The WKBCH CI shall support point-and-radius criteria for query of geographic Metadata by text and graphical input.
			S-CLS-10080	B	The WKBCH CI shall support polygonal coordinate criteria for query of geographic Metadata by graphical input.
			S-CLS-10090	B	The WKBCH CI shall support query of geographic Metadata by geographic name by text input.
			S-CLS-10310	B	The WKBCH CI shall provide users the capability of positioning the cursor by entering an image X,Y coordinate.
			S-CLS-10320	B	The WKBCH CI shall provide users the option to display Latitude/Longitude pairs as symbols, displayed in their proper geolocation on all visualizations produced by the WKBCH CI.
			S-CLS-10460	B	The WKBCH CI shall provide users Lat/Long lists for the production of built-in vector overlays as part of the application.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-13700	B	Overlays provided for display to users shall be continuous over the entire display area, regardless of any gaps in the science data, for data following HDF-EOS geolocation conventions.
			S-CLS-15890	B	The WKBCH CI map displays shall provide the following types of geographic data sets for background reference: land/oceans, major lakes, major rivers, mountain ranges, volcanoes, major highways and railroads, urban and built-up areas, and political boundaries.
			S-CLS-13990	B	The WKBCH CI shall provide users the capability to view resulting selection area on a map when a lat/lon selection is typed in for a search.
			S-CLS-10300	B	The WKBCH CI shall provide visual overlays to aid in the selection of spatial data and to enhance the display of geographic metadata.
			S-CLS-10060	A	The WKBCH CI shall support a minimum bounding rectangle criteria for query of geographic Metadata by text and graphical input.
IMS-0590#A	The IMS shall provide the capability to distribute information: a. On-line (i.e., over a network) b. Off-line (hardcopy or offline data media).		S-CLS-10800	A	The WKBCH CI shall provide users the capability to specify electronic distribution of data (i.e., over a network) in Electronic Distribution Requests.
			S-CLS-10810	A	The WKBCH CI shall provide users the capability to specify off-line distribution of data (i.e., hardcopy or off-line data media) in Media Distribution Requests, as available from specific Data Servers.
IMS-0590#B	The IMS shall provide the capability to distribute information: a. On-line (i.e., over a network) b. Off-line (hardcopy or offline data media).		S-CLS-10800	A	The WKBCH CI shall provide users the capability to specify electronic distribution of data (i.e., over a network) in Electronic Distribution Requests.
			S-CLS-10810	A	The WKBCH CI shall provide users the capability to specify off-line distribution of data (i.e., hardcopy or off-line data media) in Media Distribution Requests, as available from specific Data Servers.
IMS-0600#A	The IMS shall provide the capability to search a directory of information that describes whole EOSDIS, non-EOSDIS, and ADC earth science data sets.		S-CLS-10710	A	The WKBCH CI shall provide the registered user the capability to obtain ECS data and services.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-10720	A	Registered users shall be able to obtain ECS data and services via their corresponding interfaces in the WKBCH CI, provided that the users are authorized for the specific services and/or data.
			S-CLS-10700	A	The WKBCH CI shall provide the user the capability to locate non-ECS data and services interoperable with ECS.
			S-IOS-00010	A	The ADSRV CI shall provide the capability for viewing Advertisements.
			S-IOS-00030	A	Advertising shall contain information that describes EOSDIS science data sets.
			S-IOS-00070	A	The ADSRV CI shall provide capability for displaying Advertisements for data and services provided by non-ECS systems with which ECS is interoperable.
			S-IOS-00600	A	The ADSRV CI shall provide the clients with a binding to the advertisement which can be used to issue Service Requests to the selected service or use the reference to the service in a Universal Reference
			S-IOS-00610	A	The ADSRV CI shall find Advertisements which match text string expressions in the Service Request
			S-IOS-00640	A	The ADSRV CI shall support interactive information management capabilities for users to add a Subscription to be informed of changes in the Advertisements.
			S-IOS-00650	A	The ADSRV CI shall support interactive information management capabilities for users to cancel a Subscription
			S-IOS-00660	A	The ADSRV CI shall support Subscription Update Requests.
			S-IOS-00670	A	The ADSRV CI shall be capable of obtaining the current Subscription Notification.
			S-IOS-00680	A	The ADSRV CI shall provide attributes of the identified Subscription(s) in the format specified by the output specifications, e.g., as text document(s), hyperlink document(s) or a set of data records
			S-IOS-00250	A	The ADSRV CI shall support interactive information management capabilities for authorized users to renew an existing advertisement before it expires
			S-IOS-00260	A	The ADSRV CI shall support interactive information management capabilities for users to replace an existing advertisement with an updated version

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-IOS-00770	A	The ADSRV CI shall be able to provide attributes of the Advertisements selected by a Search Request or an Advertisement Request as text document(s), hyperlink document(s) or a set of data records, in accordance with specifications contained in the request.
			S-IOS-00780	A	The ADSRV CI shall contain advertisements that describe all EOSDIS science data sets available for distribution to users.
			S-IOS-00700	A	The ADSRV CI shall accept Advertisement Requests as specified in Appendix A of the current version of 304-CD-002 for Release A and as specified in Appendix K of the current version of 304-CD-005 for Release B.
			S-IOS-00720	A	The ADSRV CI shall accept Advertisements as defined in Appendix A of the current version of 304-CD-002 for Release A and as specified in Appendix K of the current version of 304-CD-005 for Release B.
			S-IOS-00620	A	The ADSRV CI shall support browsing Advertisements and linking to Data Dictionary definitions of terms.
			S-IOS-00630	A	The ADSRV CI shall provide a capability to link advertising data to data dictionary definitions of terms.
			S-IOS-00710	A	The ADSRV CI shall accept Subscription Requests as defined in Appendix A of the current version of 304-CD-002..
			S-IOS-00760	A	The ADSRV CI shall provide Notifications in response to Subscription Events.
			S-IOS-00690	A	The ADSRV CI shall accept Search Requests in a format compatible with the Earth Science Query Language.
IMS-0600#B	The IMS shall provide the capability to search a directory of information that describes whole EOSDIS, non-EOSDIS, and ADC earth science data sets.		S-CLS-10710	A	The WKBCH CI shall provide the registered user the capability to obtain ECS data and services.
			S-CLS-10720	A	Registered users shall be able to obtain ECS data and services via their corresponding interfaces in the WKBCH CI, provided that the users are authorized for the specific services and/or data.
			S-CLS-10700	A	The WKBCH CI shall provide the user the capability to locate non-ECS data and services interoperable with ECS.
			S-IOS-00010	A	The ADSRV CI shall provide the capability for viewing Advertisements.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-IOS-00030	A	Advertising shall contain information that describes EOSDIS science data sets.
			S-IOS-00070	A	The ADSRV CI shall provide capability for displaying Advertisements for data and services provided by non-ECS systems with which ECS is interoperable.
			S-IOS-00600	A	The ADSRV CI shall provide the clients with a binding to the advertisement which can be used to issue Service Requests to the selected service or use the reference to the service in a Universal Reference
			S-IOS-00610	A	The ADSRV CI shall find Advertisements which match text string expressions in the Service Request
			S-IOS-00640	A	The ADSRV CI shall support interactive information management capabilities for users to add a Subscription to be informed of changes in the Advertisements.
			S-IOS-00650	A	The ADSRV CI shall support interactive information management capabilities for users to cancel a Subscription
			S-IOS-00660	A	The ADSRV CI shall support Subscription Update Requests.
			S-IOS-00670	A	The ADSRV CI shall be capable of obtaining the current Subscription Notification.
			S-IOS-00680	A	The ADSRV CI shall provide attributes of the identified Subscription(s) in the format specified by the output specifications, e.g., as text document(s), hyperlink document(s) or a set of data records
			S-IOS-00250	A	The ADSRV CI shall support interactive information management capabilities for authorized users to renew an existing advertisement before it expires
			S-IOS-00260	A	The ADSRV CI shall support interactive information management capabilities for users to replace an existing advertisement with an updated version
			S-IOS-00770	A	The ADSRV CI shall be able to provide attributes of the Advertisements selected by a Search Request or an Advertisement Request as text document(s), hyperlink document(s) or a set of data records, in accordance with specifications contained in the request.
			S-IOS-00780	A	The ADSRV CI shall contain advertisements that describe all EOSDIS science data sets available for distribution to users.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-IOS-00700	A	The ADSRV CI shall accept Advertisement Requests as specified in Appendix A of the current version of 304-CD-002 for Release A and as specified in Appendix K of the current version of 304-CD-005 for Release B.
			S-IOS-00720	A	The ADSRV CI shall accept Advertisements as defined in Appendix A of the current version of 304-CD-002 for Release A and as specified in Appendix K of the current version of 304-CD-005 for Release B.
			S-IOS-00620	A	The ADSRV CI shall support browsing Advertisements and linking to Data Dictionary definitions of terms.
			S-IOS-00630	A	The ADSRV CI shall provide a capability to link advertising data to data dictionary definitions of terms.
			S-IOS-00710	A	The ADSRV CI shall accept Subscription Requests as defined in Appendix A of the current version of 304-CD-002..
			S-IOS-00760	A	The ADSRV CI shall provide Notifications in response to Subscription Events.
			S-IOS-00690	A	The ADSRV CI shall accept Search Requests in a format compatible with the Earth Science Query Language.
IMS-0610#A	The IMS shall provide the capability to search the data inventory which describes each granule of EOSDIS data.		S-CLS-10910	A	The WKBCH CI shall provide users the capability to transparently search across any combination of Data Servers for stored EOSDIS Data Granules.
			S-IOS-00030	A	Advertising shall contain information that describes EOSDIS science data sets.
			S-DSS-00170	A	The SDSRV CI shall accept and process Search Requests to search the Inventory.
			S-DSS-04670	A	The SDSRV CI shall support Inventory searches based on the Core Inventory Metadata.
			S-DSS-04680	A	The SDSRV CI shall support Inventory searches based on the Product Specific Metadata.
			S-DSS-04690	A	The SDSRV CI shall support Inventory searches based on a combination of the Core Inventory Metadata and Product Specific Metadata.
IMS-0610#B	The IMS shall provide the capability to search the data inventory which describes each granule of EOSDIS data.		S-CLS-10910	A	The WKBCH CI shall provide users the capability to transparently search across any combination of Data Servers for stored EOSDIS Data Granules.
			S-IOS-00030	A	Advertising shall contain information that describes EOSDIS science data sets.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-00170	A	The SDSRV CI shall accept and process Search Requests to search the Inventory.
			S-DSS-04670	A	The SDSRV CI shall support Inventory searches based on the Core Inventory Metadata.
			S-DSS-04680	A	The SDSRV CI shall support Inventory searches based on the Product Specific Metadata.
			S-DSS-04690	A	The SDSRV CI shall support Inventory searches based on a combination of the Core Inventory Metadata and Product Specific Metadata.
			S-CLS-10190	B	The WKBCH CI shall provide the capability for users to compose searches across multiple data sets for coincident occurrences of data in space, time, or any other searchable Metadata attribute(s).
			S-CLS-10930	B	The WKBCH CI shall provide users the capability to search inventory based on any combination of the inventory core metadata attributes and inventory product specific metadata attributes.
			S-DMS-00300	B	The LIMGR CI shall provide the capability to search for Data Granules of EOSDIS data stored for all Data Servers represented in their local Schema.
			S-DMS-10310	B	The DIMGR CI shall provide the capability to search for Data Granules of EOSDIS data stored across DAACs for specific science disciplines.
IMS-0620#A	The IMS shall provide access to inventories of selected ODCs and ADCs via level II and level III catalog interoperability as specified in ICDs.		S-CLS-15650	A	The WKBCH CI shall provide an interface for users to obtain data products from the NOAA SAA.
IMS-0620#B	The IMS shall provide access to inventories of selected ODCs and ADCs via level II and level III catalog interoperability as specified in ICDs.		S-DMS-30560	B	The GTWAY CI shall support two-way Level 2 or 3 catalog interoperability, as defined by the CEOS, for the interface between the ECS and the NOAA SAAs.
			S-DMS-30600	B	The GTWAY CI shall have the capability to send User Authentication Requests to the NOAA SAAs using Version 0 system protocols.
			S-DMS-30610	B	The GTWAY CI shall have the capability to receive User Authentication Information from the NOAA SAAs using Version 0 system protocols.
			S-DMS-30620	B	The GTWAY CI shall have the capability to receive User Authentication Requests from the NOAA SAAs using Version 0 system protocols.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-30630	B	The GTWAY CI shall have the capability to send User Authentication Information to the NOAA SAAs using Version 0 system protocols.
			S-DMS-30640	B	The GTWAY CI shall have the capability to receive Inventory Search Requests from the NOAA SAAs using Version 0 system protocols.
			S-DMS-30650	B	The GTWAY CI shall have the capability to send Inventory Search Results to the NOAA SAAs using Version 0 system protocols.
			S-DMS-30660	B	The GTWAY CI shall have the capability to send Inventory Search Requests to the NOAA SAAs using Version 0 system protocols.
			S-DMS-30670	B	The GTWAY CI shall have the capability to receive Inventory Search Results from the NOAA SAAs using Version 0 system protocols.
			S-DMS-30680	B	The GTWAY CI shall have the capability to receive Browse Requests from the NOAA SAAs using Version 0 system protocols.
			S-DMS-30690	B	The GTWAY CI shall have the capability to send Browse Requests to the NOAA SAAs using Version 0 system protocols.
			S-DMS-30700	B	The GTWAY CI shall have the capability to send Product Requests to the NOAA SAAs using Version 0 system protocols.
			S-DMS-30710	B	The GTWAY CI shall have the capability to receive Product Delivery Status from the NOAA SAAs using Version 0 system protocols.
			S-DMS-30720	B	The GTWAY CI shall have the capability to send Product Delivery Status Requests to the NOAA SAAs using Version 0 system protocols.
			S-DMS-30730	B	The GTWAY CI shall have the capability to receive Product Requests from the NOAA SAAs using Version 0 system protocols.
			S-DMS-30740	B	The GTWAY CI shall have the capability to send Product Delivery Status to the NOAA SAAs using Version 0 system protocols.
			S-DMS-30750	B	The GTWAY CI shall have the capability to receive Product Delivery Status Requests from the NOAA SAAs using Version 0 system protocols.
			S-DMS-30520	A	The GTWAY CI shall provide utilities which extract from the Data Dictionary the information needed by the V0 Client, in the format expected by the V0 Client.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-0625#A	The IMS shall provide bi-directional interoperability between ECS and V0 for access to the inventory metadata, guide information, and browse products via level III catalog interoperability as specified in ICDs.	A: V0 2-way interoperability	S-DMS-30360	A	The GTWAY CI shall have the capability to receive Inventory Search Requests from the Version 0 IMS using Version 0 system protocols.
			S-DMS-30370	A	The GTWAY CI shall have the capability to send Inventory Search Results to the Version 0 IMS using Version 0 system protocols.
			S-DMS-30380	A	The GTWAY CI shall have the capability to receive Browse Requests from the Version 0 IMS using Version 0 system protocols.
			S-DMS-30400	A	The GTWAY CI shall have the capability to receive Product Requests from the Version 0 IMS using Version 0 system protocols.
IMS-0625#B	The IMS shall provide bi-directional interoperability between ECS and V0 for access to the inventory metadata, guide information, and browse products via level III catalog interoperability as specified in ICDs.	B: Full capability	S-DMS-30360	A	The GTWAY CI shall have the capability to receive Inventory Search Requests from the Version 0 IMS using Version 0 system protocols.
			S-DMS-30370	A	The GTWAY CI shall have the capability to send Inventory Search Results to the Version 0 IMS using Version 0 system protocols.
			S-DMS-30380	A	The GTWAY CI shall have the capability to receive Browse Requests from the Version 0 IMS using Version 0 system protocols.
			S-DMS-30400	A	The GTWAY CI shall have the capability to receive Product Requests from the Version 0 IMS using Version 0 system protocols.
			S-DMS-30310	B	The GTWAY CI shall have the capability to send Inventory Search Requests to the Version 0 IMS using Version 0 system protocols.
			S-DMS-30320	B	The GTWAY CI shall have the capability to receive Inventory Search Results from the Version 0 IMS using Version 0 system protocols.
			S-DMS-30340	B	The GTWAY CI shall have the capability to send Browse Requests to the Version 0 IMS using Version 0 system protocols.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-30350	B	The GTWAY CI shall have the capability to send Product Requests to the Version 0 IMS using Version 0 system protocols.
			S-DMS-30570	B	The GTWAY CI shall support two-way Level 3 catalog interoperability, as defined by the CEOS, for the interface between the ECS and V0.
IMS-0630#A	The IMS shall provide the capability to select metadata for retrieval by: a. Boolean operators b. Relational operators c. Attribute values d. Search strings e. Combinations thereof		S-CLS-10030	A	The WKBCH CI shall provide graphical aids to assist users in formulating Search Requests.
			S-CLS-10040	A	The WKBCH CI shall support a Geographic Reference criteria for query of geographic Metadata.
			S-CLS-10050	A	The WKBCH CI shall support query of geographic Metadata by data element content criteria specified in Metadata.
			S-CLS-10780	A	The WKBCH CI shall list Dependent Valid Values to assist users in formulating Search Requests.
			S-CLS-10100	A	The WKBCH CI shall support phrase matching criteria for query of alpha-numeric non-geographic Metadata.
			S-CLS-10110	A	The WKBCH CI shall support an exact word matching criteria for query of alpha-numeric non-geographic Metadata.
			S-CLS-10060	A	The WKBCH CI shall support a minimum bounding rectangle criteria for query of geographic Metadata by text and graphical input.
			S-CLS-10120	A	The WKBCH CI shall support character set (string) matching criteria for query of alpha-numeric non-geographic Metadata.
IMS-0630#B	The IMS shall provide the capability to select metadata for retrieval by: a. Boolean operators b. Relational operators c. Attribute values d. Search strings e. Combinations thereof		S-CLS-10030	A	The WKBCH CI shall provide graphical aids to assist users in formulating Search Requests.
			S-CLS-10040	A	The WKBCH CI shall support a Geographic Reference criteria for query of geographic Metadata.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-10050	A	The WKBCH CI shall support query of geographic Metadata by data element content criteria specified in Metadata.
			S-CLS-10780	A	The WKBCH CI shall list Dependent Valid Values to assist users in formulating Search Requests.
			S-CLS-10070	B	The WKBCH CI shall support point-and-radius criteria for query of geographic Metadata by text and graphical input.
			S-CLS-10080	B	The WKBCH CI shall support polygonal coordinate criteria for query of geographic Metadata by graphical input.
			S-CLS-10090	B	The WKBCH CI shall support query of geographic Metadata by geographic name by text input.
			S-CLS-10130	B	The WKBCH CI shall provide users the capability to use boolean operators to relate query parameters for geographic and non-geographic Metadata.
			S-CLS-10170	B	The WKBCH CI shall support min/max range Search Criteria for query of numerical non-geographic Metadata.
			S-CLS-10180	B	The WKBCH CI shall support any combination of exact word match, exact phrase match, character set, wildcard, character range, logical and boolean operator, and min/max range Search Criteria for query of non-geographic Metadata.
			S-CLS-10100	A	The WKBCH CI shall support phrase matching criteria for query of alpha-numeric non-geographic Metadata.
			S-CLS-10110	A	The WKBCH CI shall support an exact word matching criteria for query of alpha-numeric non-geographic Metadata.
			S-DMS-10765	B	The DIMGR CI shall accept searches in the Earth Science Query Language.
			S-CLS-10140	B	The WKBCH CI shall support wildcard construct (prefix, embedded, suffix) matching criteria for query of alpha-numeric non-geographic Metadata.
			S-DMS-10770	B	The Earth Science Query Language shall support the specification of search conditions using search expressions in combination with boolean and relational operators.
			S-CLS-10150	B	The WKBCH CI shall support character range matching criteria for query of alpha-numeric non-geographic Metadata.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-10771	B	The Earth Science Query Language shall support the specification of search expressions using the attribute names and exact word matches for string attributes associated with non-geographic metadata.
			S-CLS-10160	B	The WKBCH CI shall support logical and boolean operators matching criteria for query of alpha-numeric non-geographic Metadata.
			S-CLS-10060	A	The WKBCH CI shall support a minimum bounding rectangle criteria for query of geographic Metadata by text and graphical input.
			S-DMS-00020	B	The LIMGR CI shall accept Search Requests in a format compatible with the Earth Science Query Language.
			S-CLS-10120	A	The WKBCH CI shall support character set (string) matching criteria for query of alpha-numeric non-geographic Metadata.
			S-DMS-20130	B	The DDICT CI shall have the capability to accept from the Workbench CI data dictionary search requests consisting of any combination of the following: Earth Science Data Types, Core Metadata attribute, and Product Specific Metadata in a format compatible with the Earth Science Query Language.
			S-IOS-00690	A	The ADSRV CI shall accept Search Requests in a format compatible with the Earth Science Query Language.
			S-CLS-10175	B	The WKBCH CI shall support SQL syntax for queries on Advertising.
IMS-0640#A	The IMS shall provide the capability to query geographic metadata by any of the following criteria at a minimum: a. Geographic reference b. Data element content (as specified in metadata) c. Minimum bounding rectangle d. Point and radius f. Geographic name (based on a standard data base, such as USGS Geographic Names Information System) g. WRS h. Any combination of the above	There was a mistake made in the F&PRS. GSFC has been notified. It appears as though item f. replaced the original item f. This is not the case item f. WRS is and additional item and becomes item g. REL A: Items a, b, & c are implemented in this release.	S-CLS-10040	A	The WKBCH CI shall support a Geographic Reference criteria for query of geographic Metadata.
			S-CLS-10050	A	The WKBCH CI shall support query of geographic Metadata by data element content criteria specified in Metadata.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-10060	A	The WKBCH CI shall support a minimum bounding rectangle criteria for query of geographic Metadata by text and graphical input.
IMS-0640#B	The IMS shall provide the capability to query geographic metadata by any of the following criteria at a minimum: a. Geographic reference b. Data element content (as specified in metadata) c. Minimum bounding rectangle d. Point and radius e. Polygon f. Geographic name (based on a standard data base, such as USGS Geographic Names Information System) g. WRS h. Any combination of the above	There was a mistake made in the F&PRS. GSFC has been notified. It appears as though item f. replaced the original item f. This is not the case item f. WRS is and additional item and becomes item g.	S-CLS-10040	A	The WKBCH CI shall support a Geographic Reference criteria for query of geographic Metadata.
			S-CLS-10050	A	The WKBCH CI shall support query of geographic Metadata by data element content criteria specified in Metadata.
			S-CLS-13570	A	The user shall be able to indicate a spatial search criterion by drawing a polygon on a displayed map overlay.
			S-CLS-10070	B	The WKBCH CI shall support point-and-radius criteria for query of geographic Metadata by text and graphical input.
			S-CLS-10075	B	The WKBCH CI shall support point criteria for query of geographic Metadata by text and graphical input.
			S-CLS-10080	B	The WKBCH CI shall support polygonal coordinate criteria for query of geographic Metadata by graphical input.
			S-CLS-10090	B	The WKBCH CI shall support query of geographic Metadata by geographic name by text input.
			S-CLS-10190	B	The WKBCH CI shall provide the capability for users to compose searches across multiple data sets for coincident occurrences of data in space, time, or any other searchable Metadata attribute(s).
			S-CLS-14500	B	Geographic selection criteria for a Product Request shall be synchronized so that selection of an area on a Product Request map display will be translated into lat/lon coordinates in a Product Request submissions window.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-14510	B	Geographic selection criteria for a DAR shall be synchronized so that typed lat/lon coordinates in a Product Request submission window will be graphically displayed as a blocked out area on a Product Request map display.
			S-CLS-15940	B	The WKBCH CI shall provide users the capability to search for global granules.
			S-CLS-13990	B	The WKBCH CI shall provide users the capability to view resulting selection area on a map when a lat/lon selection is typed in for a search.
			S-CLS-10060	A	The WKBCH CI shall support a minimum bounding rectangle criteria for query of geographic Metadata by text and graphical input.
IMS-0650#A	The IMS shall query non-geographic metadata by any of the following criteria at a minimum: a. Exact word match b. Phrase match c. Character set (string) d. Wildcard construct (prefix, embedded, suffix) e. Character range f. Logical and Boolean operators g. Min/max range search h. Any combination of the above	A: Supports phrase, exact word and substring matching.	S-CLS-10100	A	The WKBCH CI shall support phrase matching criteria for query of alpha-numeric non-geographic Metadata.
			S-CLS-10110	A	The WKBCH CI shall support an exact word matching criteria for query of alpha-numeric non-geographic Metadata.
			S-CLS-10120	A	The WKBCH CI shall support character set (string) matching criteria for query of alpha-numeric non-geographic Metadata.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-0650#B	The IMS shall query non-geographic metadata by any of the following criteria at a minimum: a. Exact word match b. Phrase match c. Character set (string) d. Wildcard construct (prefix, embedded, suffix) e. Character range f. Logical and Boolean operators g. Min/max range search h. Any combination of the above		S-CLS-10780	A	The WKBCH CI shall list Dependent Valid Values to assist users in formulating Search Requests.
			S-CLS-10130	B	The WKBCH CI shall provide users the capability to use boolean operators to relate query parameters for geographic and non-geographic Metadata.
			S-CLS-10170	B	The WKBCH CI shall support min/max range Search Criteria for query of numerical non-geographic Metadata.
			S-CLS-10180	B	The WKBCH CI shall support any combination of exact word match, exact phrase match, character set, wildcard, character range, logical and boolean operator, and min/max range Search Criteria for query of non-geographic Metadata.
			S-CLS-10190	B	The WKBCH CI shall provide the capability for users to compose searches across multiple data sets for coincident occurrences of data in space, time, or any other searchable Metadata attribute(s).
			S-CLS-10100	A	The WKBCH CI shall support phrase matching criteria for query of alpha-numeric non-geographic Metadata.
			S-CLS-10110	A	The WKBCH CI shall support an exact word matching criteria for query of alpha-numeric non-geographic Metadata.
			S-DMS-10765	B	The DIMGR CI shall accept searches in the Earth Science Query Language.
			S-CLS-10140	B	The WKBCH CI shall support wildcard construct (prefix, embedded, suffix) matching criteria for query of alpha-numeric non-geographic Metadata.
			S-CLS-10150	B	The WKBCH CI shall support character range matching criteria for query of alpha-numeric non-geographic Metadata.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-10771	B	The Earth Science Query Language shall support the specification of search expressions using the attribute names and exact word matches for string attributes associated with non-geographic metadata.
			S-CLS-10160	B	The WKBCH CI shall support logical and boolean operators matching criteria for query of alpha-numeric non-geographic Metadata.
			S-DMS-10772	B	The Earth Science Query Language shall support the specification of search expressions using the attribute names and phrase matches for string attributes associated with non-geographic metadata.
			S-DMS-10773	B	The Earth Science Query Language shall support the specification of search expressions using the attribute names and character sets for string attributes associated with non-geographic metadata.
			S-DMS-10774	B	The Earth Science Query Language shall support the specification of search expressions using the attribute names and wildcard constructs for string attributes associated with non-geographic metadata.
			S-DMS-10775	B	The Earth Science Query Language shall support the specification of search expressions using the attribute names and character ranges for string attributes associated with non-geographic metadata.
			S-DMS-10776	B	The Earth Science Query Language shall support the specification of search expressions using the attribute names and minimum and maximum range for numeric and date/time attributes associated with non-geographic metadata.
			S-DMS-00020	B	The LIMGR CI shall accept Search Requests in a format compatible with the Earth Science Query Language.
			S-CLS-10120	A	The WKBCH CI shall support character set (string) matching criteria for query of alpha-numeric non-geographic Metadata.
			S-DMS-20130	B	The DDICT CI shall have the capability to accept from the Workbench CI data dictionary search requests consisting of any combination of the following: Earth Science Data Types, Core Metadata attribute, and Product Specific Metadata in a format compatible with the Earth Science Query Language.
			S-IOS-00690	A	The ADSRV CI shall accept Search Requests in a format compatible with the Earth Science Query Language.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-10175	B	The WKBCH CI shall support SQL syntax for queries on Advertising.
IMS-0660#A	The IMS shall provide inventory metadata search based on any combination of the core (Table C-10, Appendix C) and where applicable dataset-specific (Table C-11, Appendix C) inventory metadata attributes and geophysical parameters at a minimum.		S-DSS-04670	A	The SDSRV CI shall support Inventory searches based on the Core Inventory Metadata.
			S-DSS-04680	A	The SDSRV CI shall support Inventory searches based on the Product Specific Metadata.
			S-DSS-04690	A	The SDSRV CI shall support Inventory searches based on a combination of the Core Inventory Metadata and Product Specific Metadata.
IMS-0660#B	The IMS shall provide inventory metadata search based on any combination of the core (Table C-10, Appendix C) and where applicable dataset-specific (Table C-11, Appendix C) inventory metadata attributes and geophysical parameters at a minimum.		S-DSS-04670	A	The SDSRV CI shall support Inventory searches based on the Core Inventory Metadata.
			S-DSS-04680	A	The SDSRV CI shall support Inventory searches based on the Product Specific Metadata.
			S-DSS-04690	A	The SDSRV CI shall support Inventory searches based on a combination of the Core Inventory Metadata and Product Specific Metadata.
			S-CLS-10930	B	The WKBCH CI shall provide users the capability to search inventory based on any combination of the inventory core metadata attributes and inventory product specific metadata attributes.
			S-CLS-15950	B	The WKBCH CI shall provide users the capability to set thresholds for the number of results returned from a query.
IMS-0665#A	The IMS shall provide informational messages to indicate that a query is being executed, and shall provide the capability for the user to abort any time-intensive operations.		S-CLS-10940	A	The WKBCH CI shall provide informational messages to users to indicate that a query is being executed.
			S-DSS-01150	A	The SDSRV CI shall log all Service Requests entered during a client session.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-01160	A	The SDSRV CI shall provide periodic, asynchronous status messages to the client during the execution of a Search Request.
IMS-0665#B	The IMS shall provide informational messages to indicate that a query is being executed, and shall provide the capability for the user to abort any time-intensive operations.		S-CLS-10940	A	The WKBCH CI shall provide informational messages to users to indicate that a query is being executed.
			S-DSS-01150	A	The SDSRV CI shall log all Service Requests entered during a client session.
			S-DSS-01160	A	The SDSRV CI shall provide periodic, asynchronous status messages to the client during the execution of a Search Request.
			S-CLS-13230	B	The WKBCH CI shall provide users the capability to cancel any time-intensive Service Requests by issuing a Cancellation Request.
			S-CLS-13730	B	Users shall be able to request an update of the status of a previously submitted Search Request.
			S-CLS-13740	B	Users shall be able to request that the workbench poll the status of a Search Request at a user selectable time interval.
			S-DMS-00250	B	The LIMGR CI shall maintain query log files.
			S-DMS-00560	B	The LIMGR CI shall provide the capability to manually abort any time-intensive operations.
			S-DMS-10100	B	The DIMGR CI shall provide the capability to abort any time-intensive operations.
			S-DMS-10130	B	The DIMGR CI shall maintain query log files.
			S-DSS-00115	B	The SDSRV CI shall accept Search Status Requests for a specified active Search Request and, if requested, provide all Search Results accumulated for that Search Request.
			S-DSS-00116	B	The SDSRV CI shall accept Search Status Requests for a specified active Search Request and, if requested, provide all Search Results accumulated since the last Search Status Request for that Search Request.
			S-DSS-00230	B	The SDSRV CI shall provide users the capability to cancel their own Service Requests.
			S-DSS-04740	B	The SDSRV CI shall provide DAR status to the client, in response to DAR Status Requests.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-04770	B	The SDSRV CI shall send DAR Status Requests to ASTER ICC.
			S-CLS-11040	B	The WKBCH CI shall provide users the capability to obtain data processing Status during the processing of a request initiated by the user.
			S-DMS-30760	B	The GTWAY CI shall provide partial results upon request which consists of the results from the start of the request or since the last request for results.
			S-DMS-10760	B	The DIMGR CI shall provide partial results upon request which consists of the results from the start of the request or since the last request for results.
			S-DMS-00740	B	PThe LIMGR CI shall provide partial results upon request which consists of the results from the start of the request or since the last request for results.
IMS-0670#B	The IMS shall provide the capability to accept, validate, and fill orders from users for periodic delivery of information stored at the IMS.		S-CLS-10950	B	The WKBCH CI shall provide the capability for users to submit Subscription Requests for periodic delivery of data described by Advertisements.
			S-CLS-11250	B	The WKBCH CI shall provide a capability to submit Subscription Requests for the distribution of ECS data.
			S-CLS-12730	B	The WKBCH CI shall be able to accept Notifications of events associated with Service Requests or sessions
			S-CLS-12740	B	The WKBCH CI shall be able to display such event Notifications to the user and accept input from the user where these events require instructions from the user, e.g., when a request exceeds a client specified threshold, and provide such feedback to the service which sent the event..
			S-CLS-12760	B	The WKBCH CI shall provide users the capability to suppress the display of event Notifications if the Notifications do not require user input or if the user has defined default instructions, by type of event and session..
			S-CLS-15970	B	The WKBCH CI shall be able to accept and display Notifications of events associated with subscriptions.
			S-DMS-01070	B	The LIMGR CI shall accept Subscriptions for LIM data.
			S-DMS-11070	B	The DIMGR CI shall accept Subscriptions for DIM data.
			S-CLS-12780	B	The WKBCH CI shall provide the default instructions defined by the user in response to an event if the the user has requested that the event Notification be suppressed.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-12750	B	The WKBCH CI shall provide users the capability to define default instructions for such events, by type of event and session..
			S-CLS-12770	B	The WKBCH CI shall provide users the capability to modify and remove default instructions and rescind the directive to suppress event Notification, by type of event and session..
IMS-0680#B	The IMS shall provide data order capabilities integrated with metadata search capabilities.		S-CLS-10220	B	The WKBCH CI shall allow users to formulate a Data Request based on the results of searching the inventory core metadata attributes and inventory product specific metadata attributes.
IMS-0690#A	The IMS shall provide the capability to visualize pre-order data products and metadata (e.g. coverage maps, summary data) to facilitate the data selection and ordering process.		S-CLS-10290	A	The WKBCH CI shall provide users the capability to browse data in ECS supported visualization formats in a window during the data selection and acquisition process,
			S-CLS-10330	A	The WKBCH CI shall provide users the capability of displaying 8-bit raster images.
			S-CLS-10340	A	The WKBCH CI shall provide users the capability of displaying 24-bit raster images.
			S-CLS-10360	A	The WKBCH CI shall provide users the capability to display browse information in table format.
			S-CLS-10370	A	The WKBCH CI shall provide users the capability to display browse information in text format.
			S-CLS-10380	A	The WKBCH CI shall provide users the capability to produce an animation of a browse movie loop.
IMS-0690#B	The IMS shall provide the capability to visualize pre-order data products and metadata (e.g. coverage maps, summary data) to facilitate the data selection and ordering process.		S-CLS-10290	A	The WKBCH CI shall provide users the capability to browse data in ECS supported visualization formats in a window during the data selection and acquisition process,
			S-CLS-10330	A	The WKBCH CI shall provide users the capability of displaying 8-bit raster images.
			S-CLS-10340	A	The WKBCH CI shall provide users the capability of displaying 24-bit raster images.
			S-CLS-10360	A	The WKBCH CI shall provide users the capability to display browse information in table format.
			S-CLS-10370	A	The WKBCH CI shall provide users the capability to display browse information in text format.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-10380	A	The WKBCH CI shall provide users the capability to produce an animation of a browse movie loop.
			S-CLS-10470	B	The WKBCH CI shall provide users the capability to display browse information in vector graphic format.
			S-CLS-13580	B	The WKBCH CI shall provide users the capability to graphically represent data availability for products(s) vs. time.
			S-CLS-13590	B	The WKBCH CI shall provide users the capability to graphically view the temporal extent of Data Granules.
			S-CLS-13990	B	The WKBCH CI shall provide users the capability to view resulting selection area on a map when a lat/lon selection is typed in for a search.
IMS-0700#B	The IMS shall provide the capability for users to request subsetted, subsampled, and summary data products, which have been processed at the PGS during the routine production processing and archived at the DADS, whenever associated inventory information is displayed.		S-CLS-10240	B	The WKBCH CI shall provide the capability for users to request subsetted, subsampled, and summary products.
IMS-0705#B	The IMS shall provide the capability to request a subset (ie. scene) of a Landsat 7 subinterval identified by: a. WRS b. Geographic location (x,,z) spatial with rectangular boundries c. Spectral Band d. Time		S-CLS-10240	B	The WKBCH CI shall provide the capability for users to request subsetted, subsampled, and summary products.
			S-DSS-02901	B	The SDSRV CI shall provide the capability to subset, subsample, or average data within a granule based on Geographic location for products specified in Appendix F - Data Type Matrix, of the current version of 304-CD-005.
			S-DSS-02902	B	The SDSRV CI shall provide the capability to subset, subsample, or average data within a granule based on Spectral band for products specified in Appendix F - Data Type Matrix, of the current version of 304-CD-005.
			S-DSS-02903	B	The SDSRV CI shall provide the capability to subset, subsample, or average data within a granule based on Time for products specified in Appendix F - Data Type Matrix, of the current version of 304-CD-005.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-02904	B	The SDSRV CI shall provide the capability to subset, subsample, or average data within a granule based on WRS for products specified in Appendix F - Data Type Matrix, of the current version of 304-CD-005.
IMS-0720#B	The IMS shall provide the capability to request data products which are processed ad hoc in response to user requests for subsetting, subsampling, or averaging within a granule based on defined criteria to include: a. Geographical location (x, y, z - spatial with rectangular boundaries) b. Spectral band c. Time d. WRS		S-CLS-10290	A	The WKBCH CI shall provide users the capability to browse data in ECS supported visualization formats in a window during the data selection and acquisition process,
			S-CLS-10330	A	The WKBCH CI shall provide users the capability of displaying 8-bit raster images.
			S-CLS-10340	A	The WKBCH CI shall provide users the capability of displaying 24-bit raster images.
			S-CLS-11220	B	The WKBCH CI shall provide the capability for users to issue Production Requests for the ad-hoc processing of subsetting, subsampled, and summary products based on geographical location (x, y, z - spatial with rectangular boundaries).
			S-CLS-11230	B	The WKBCH CI shall provide the capability for users to issue Production Requests for the ad-hoc processing of subsetting, subsampled, and summary products based on spectral band.
			S-CLS-11240	B	The WKBCH CI shall provide the capability for users to issue Production Requests for the ad-hoc processing of subsetting, subsampled, and summary products based on time.
IMS-0730#B	The IMS shall, using information supplied by the DADS, provide the user an estimate of how long it will take before subsetting, subsampled, and summary data products are ready for visualization.		S-CLS-10250	B	The WKBCH CI shall automatically provide the user an estimate of how long it will take before products are ready for delivery.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-0740#A	The IMS shall provide the capability for users to generate and update requests for one-time orders or standing orders for the DADS to distribute DADS archive holdings to include, at a minimum, Standard Products, Standard Product software, spacecraft housekeeping and ancillary data.	A: Standard products, S/C housekeeping and Ancillary data	S-DSS-01530	A	The SDSRV CI shall provide the capability for Subscriptions to notify users via email or directly to a program interface.
			S-DSS-01630	A	The SDSRV CI shall provide the capability to notify a subscriber of QA changes.
			S-DSS-01640	A	The SDSRV CI shall provide the capability to notify a subscriber on individual data granule basis.
			S-CLS-10960	A	The WKBCH CI shall provide the capability for users to generate orders for ECS data to be distributed on a one-time basis.
IMS-0740#B	The IMS shall provide the capability for users to generate and update requests for one-time orders or standing orders for the DADS to distribute DADS archive holdings to include, at a minimum, Standard Products, Standard Product software, EOC historical data, spacecraft housekeeping and ancillary data, and engineering data.		S-DSS-01530	A	The SDSRV CI shall provide the capability for Subscriptions to notify users via email or directly to a program interface.
			S-DSS-01630	A	The SDSRV CI shall provide the capability to notify a subscriber of QA changes.
			S-DSS-01640	A	The SDSRV CI shall provide the capability to notify a subscriber on individual data granule basis.
			S-CLS-10280	B	The WKBCH CI shall provide users the capability to create, cancel, renew, update and list the contents of Subscriptions, including standing requests.
			S-CLS-11140	B	The WKBCH CI shall provide the capability for users to update Distribution Requests prior to the shipment of Data.
			S-CLS-11250	B	The WKBCH CI shall provide a capability to submit Subscription Requests for the distribution of ECS data.
			S-CLS-11260	B	The WKBCH CI shall provide the capability for users to update Subscriptions for the distribution of ECS data.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-13750	B	The WKBCH CI shall provide users the capability to submit Subscription Requests which request a periodic search for new documents meeting user specified search conditions. All search conditions supported by the document search user interface shall be allowed in this context.
			S-CLS-13760	B	The WKBCH CI shall provide users the capability to issue a Subscription Request for revisions of a given document.
			S-CLS-13770	B	The WKBCH CI shall provide users the capability to issue a Subscription Request for new documents, based on topical keywords.
			S-CLS-14030	B	The WKBCH CI shall provide users the capability to retrieve any previously saved Data Request parameters into a new Data Request, edit the parameters, save the modified parameters, and/or submit the new Data Request.
			S-CLS-14250	B	The WKBCH CI shall provide users the capability to issue a Status Request to determine the status of any active Service Request.
			S-DSS-01540	B	The SDSRV CI shall provide the capability to bundle notification of discrete events into a single notice to the subscriber.
			S-DSS-01620	B	The SDSRV CI shall validate that Subscription Update Requests specify a valid Subscription Identifier and a valid replacement Subscription.
			S-DSS-01700	B	The SDSRV CI shall periodically report on new events for timer-based Subscriptions and will not repeat notification of old events.
			S-DSS-04760	B	The SDSRV CI shall accept Subscription Requests from the client linked to a specified, existing DAR.
			S-DSS-10020	B	The DDSRV CI shall accept Subscriptions for metadata from the client.
			S-CLS-10960	A	The WKBCH CI shall provide the capability for users to generate orders for ECS data to be distributed on a one-time basis.
IMS-0750#B	The IMS shall provide the capability for the user to order Standard Product software and associated documentation in accordance with EOSDIS distribution criteria.		S-CLS-10970	B	The WKBCH CI shall provide the capability for the user to request standard product software and associated documentation to be distributed on-line.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-10980	B	The WKBCH CI shall provide the capability for the user to request standard product software and associated documentation to be distributed off-line (i.e. media).
IMS-0760#A	The IMS shall access distribution criteria for each data product and data product software and compare the distribution criteria to the requester's data access rights to verify that the data and software can be distributed as requested.		S-DSS-30530	A	The DDIST CI shall provide the capability to limit access to Data in the user pull area to the science user and the operations staff.
			S-DSS-30030	A	The DDIST CI shall validate each Electronic Distribution Request and verify that the format conforms to that specified in Appendix A of the current version of 304-CD-002 for Release A and as specified in Appendix K of the current version of 304-CD-005 for Release B.
			S-DSS-30060	A	The DDIST CI shall validate each Media Distribution Request and verify that it conforms to the format specified in Appendix A of the current version of 304-CD-002 for Release A and as specified in Appendix K of the current version of 304-CD-005 for Release B.
IMS-0760#B	The IMS shall access distribution criteria for each data product and data product software and compare the distribution criteria to the requester's data access rights to verify that the data and software can be distributed as requested.		S-DSS-30530	A	The DDIST CI shall provide the capability to limit access to Data in the user pull area to the science user and the operations staff.
			S-DSS-30030	A	The DDIST CI shall validate each Electronic Distribution Request and verify that the format conforms to that specified in Appendix A of the current version of 304-CD-002 for Release A and as specified in Appendix K of the current version of 304-CD-005 for Release B.
			S-DSS-30060	A	The DDIST CI shall validate each Media Distribution Request and verify that it conforms to the format specified in Appendix A of the current version of 304-CD-002 for Release A and as specified in Appendix K of the current version of 304-CD-005 for Release B.
IMS-0770#B	The IMS shall allow users to formulate a data order based on any combination of the inventory core metadata attributes and geophysical parameters at a minimum.		S-CLS-10220	B	The WKBCH CI shall allow users to formulate a Data Request based on the results of searching the inventory core metadata attributes and inventory product specific metadata attributes.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-0780#A	The IMS shall accept and validate from the ECS users, IPs, ADCs, and ODCs requests for ECS archival data products.		S-CLS-10990	A	The WKBCH CI shall provide users the capability to specify the content of Data Requests.
			S-DSS-00015	A	The SDSRV CI shall insure that each Data Request includes a User Identifier, a Request Priority, and a Data Identifier.
			S-CLS-15740	A	The WKBCH CI shall restrict users' access to data and services for which the users lack sufficient privileges.
			S-CLS-15750	A	The WKBCH CI shall provide users confirmation or rejection of their data requests.
			S-CLS-15840	A	Confirmation or rejection of product requests shall contain requestor identification, request identification, request status, and the reason for rejection if rejected.
IMS-0780#B	The IMS shall accept and validate from the ECS users, IPs, ADCs, and ODCs requests for ECS archival data products.	B: ASTER (IP) REQUESTS FOR ECS PRODUCTS; ASTER GDS interfaces to EDC DAAC only.	S-DSS-00015	A	The SDSRV CI shall insure that each Data Request includes a User Identifier, a Request Priority, and a Data Identifier.
			S-CLS-15740	A	The WKBCH CI shall restrict users' access to data and services for which the users lack sufficient privileges.
			S-CLS-15750	A	The WKBCH CI shall provide users confirmation or rejection of their data requests.
			S-CLS-15840	A	Confirmation or rejection of product requests shall contain requestor identification, request identification, request status, and the reason for rejection if rejected.
			S-DMS-30730	B	The GTWAY CI shall have the capability to receive Product Requests from the NOAA SAAs using Version 0 system protocols.
IMS-0790#B	The IMS shall determine the location of requested data products and submit the product order to the data center where the data are archived.		S-DMS-10030	B	The DIMGR CI shall compare received Search Requests to its federated Schema to determine to which LIMs or Data Servers the Search Request must be forwarded and generate a Distributed Query Plan.
IMS-0800#B	The IMS shall determine the amount of data expected to be returned as the result of the product order and provide the information to the requester.	B: LIM/DIM capabilities	S-CLS-11010	B	The WKBCH CI shall automatically provide the capability to confirm or reject a Data Request.
			S-CLS-15820	B	The WKBCH CI shall provide users the amount of data expected to be returned as the result of a product request.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-0810#A	The IMS shall prepare, for output to the DADS, product orders to retrieve specified data from the archive and distribute it, which contains the following information at a minimum: a. Requester identification b. Data type c. Data set identifier e. Data formats f. Distribution instructions, including media requirements g. Request priority h. Suggested earliest start time i. Suggested latest completion time		S-CLS-10990	A	The WKBCH CI shall provide users the capability to specify the content of Data Requests.
IMS-0810#B	The IMS shall prepare, for output to the DADS, product orders to retrieve specified data from the archive and distribute it, which contains the following information at a minimum: a. Requester identification b. Data type c. Data set identifier d. Data set subsetting instructions e. Data formats f. Distribution instructions, including media requirements g. Request priority h. Suggested earliest start time i. Suggested latest completion time		S-CLS-10990	A	The WKBCH CI shall provide users the capability to specify the content of Data Requests.
			S-CLS-15830	B	Data Distribution Requests shall contain requester identification, data type, data set identifier, data formats, distribution and media instructions, request priority, suggested earliest start time, and suggested latest completion time.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-0820#A	The IMS shall provide to the user product order status information from the DADS to confirm or reject an order, which contains the following information at a minimum: a. Requester identification b. Request identification c. Request status d. If rejection, then the reason for the rejection		S-CLS-15750	A	The WKBCH CI shall provide users confirmation or rejection of their data requests.
			S-CLS-15840	A	Confirmation or rejection of product requests shall contain requestor identification, request identification, request status, and the reason for rejection if rejected.
IMS-0820#B	The IMS shall provide to the user product order status information from the DADS to confirm or reject an order, which contains the following information at a minimum: a. Requester identification b. Request identification c. Request status d. If rejection, then the reason for the rejection e. If delayed longer than latest completion time specified by user, adjusted start and completion times		S-CLS-15750	A	The WKBCH CI shall provide users confirmation or rejection of their data requests.
			S-CLS-15840	A	Confirmation or rejection of product requests shall contain requestor identification, request identification, request status, and the reason for rejection if rejected.
			S-CLS-11010	B	The WKBCH CI shall automatically provide the capability to confirm or reject a Data Request.
			S-CLS-15840	B	Confirmation or rejection of Product Requests shall contain requester identification, request identification, request status, and the reason for rejection if rejected.
IMS-0830#B	The IMS shall, using information provided by the DADS, notify users when products will not be distributed within the estimated time, and provide the reason for the delay and modified arrival times.		S-CLS-11150	B	The WKBCH CI shall provide product delay notification to users to notify them when products will not be distributed within the estimated time.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-0840#B	The IMS shall provide the capability to receive data order status from the DADS when the ordered data has been shipped to the user.		S-CLS-11020	B	The WKBCH CI shall provide users Data Request Status at the conclusion of the processing of a Data Requests.
IMS-0860#A	The IMS shall provide an interface to ADC and ODC data systems and archives that produce, process, and/or maintain Earth science data sets and that have agreed to make the information and services available to ECS.	A: 1-way NOAA interoperability	S-CLS-15610	A	The WKBCH CI shall have the capability to send Requests for Guide data to the NOAA SAAs.
			S-CLS-15620	A	The WKBCH CI shall have the capability to receive Guide Request Results from the NOAA SAAs.
			S-CLS-15630	A	The WKBCH CI shall have the capability to send Requests for Guide data to the ESDIS V0 IMS.
			S-CLS-15640	A	The WKBCH CI shall have the capability to receive Guide Request Results from the ESDIS VO IMS.
IMS-0860#B	The IMS shall provide an interface to ADC and ODC data systems and archives that produce, process, and/or maintain Earth science data sets and that have agreed to make the information and services available to ECS.	B: NOAA, CIESIN	S-CLS-15610	A	The WKBCH CI shall have the capability to send Requests for Guide data to the NOAA SAAs.
			S-CLS-15620	A	The WKBCH CI shall have the capability to receive Guide Request Results from the NOAA SAAs.
			S-CLS-15630	A	The WKBCH CI shall have the capability to send Requests for Guide data to the ESDIS V0 IMS.
			S-CLS-15640	A	The WKBCH CI shall have the capability to receive Guide Request Results from the ESDIS VO IMS.
			S-DMS-30560	B	The GTWAY CI shall support two-way Level 2 or 3 catalog interoperability, as defined by the CEOS, for the interface between the ECS and the NOAA SAAs.
			S-DMS-30600	B	The GTWAY CI shall have the capability to send User Authentication Requests to the NOAA SAAs using Version 0 system protocols.
			S-DMS-30610	B	The GTWAY CI shall have the capability to receive User Authentication Information from the NOAA SAAs using Version 0 system protocols.
			S-DMS-30620	B	The GTWAY CI shall have the capability to receive User Authentication Requests from the NOAA SAAs using Version 0 system protocols.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-30630	B	The GTWAY CI shall have the capability to send User Authentication Information to the NOAA SAAs using Version 0 system protocols.
			S-DMS-30640	B	The GTWAY CI shall have the capability to receive Inventory Search Requests from the NOAA SAAs using Version 0 system protocols.
			S-DMS-30650	B	The GTWAY CI shall have the capability to send Inventory Search Results to the NOAA SAAs using Version 0 system protocols.
			S-DMS-30660	B	The GTWAY CI shall have the capability to send Inventory Search Requests to the NOAA SAAs using Version 0 system protocols.
			S-DMS-30670	B	The GTWAY CI shall have the capability to receive Inventory Search Results from the NOAA SAAs using Version 0 system protocols.
			S-DMS-30680	B	The GTWAY CI shall have the capability to receive Browse Requests from the NOAA SAAs using Version 0 system protocols.
			S-DMS-30690	B	The GTWAY CI shall have the capability to send Browse Requests to the NOAA SAAs using Version 0 system protocols.
			S-DMS-30700	B	The GTWAY CI shall have the capability to send Product Requests to the NOAA SAAs using Version 0 system protocols.
			S-DMS-30710	B	The GTWAY CI shall have the capability to receive Product Delivery Status from the NOAA SAAs using Version 0 system protocols.
			S-DMS-30720	B	The GTWAY CI shall have the capability to send Product Delivery Status Requests to the NOAA SAAs using Version 0 system protocols.
			S-DMS-30730	B	The GTWAY CI shall have the capability to receive Product Requests from the NOAA SAAs using Version 0 system protocols.
			S-DMS-30740	B	The GTWAY CI shall have the capability to send Product Delivery Status to the NOAA SAAs using Version 0 system protocols.
			S-DMS-30750	B	The GTWAY CI shall have the capability to receive Product Delivery Status Requests from the NOAA SAAs using Version 0 system protocols.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-0870#A	The IMS shall provide access in accordance with MOUs to ADC and ODC data that b. Is stored by ADC and ODC archives and requested by EOSDIS users c. Is required as ancillary data for production processin		S-DMS-30540	A	The GTWAY CI shall provide the capability to translate Version 0 system protocol into ECS system protocols.
IMS-0870#B	The IMS shall provide access in accordance with MOUs to ADC and ODC data that a. Has been generated by ADC and ODC data systems b. Is stored by ADC and ODC archives and requested by EOSDIS users c. Is required as ancillary data for production processing		S-DMS-30540	A	The GTWAY CI shall provide the capability to translate Version 0 system protocol into ECS system protocols.
			S-DMS-10010	B	The DIMGR CI shall provide capabilities to search and obtain data across DAACs.
			S-DMS-30550	B	The GTWAY CI shall provide the capability to translate ECS system protocols into Version 0 system protocol.
IMS-0890#A	The IMS shall provide the capability to receive the metadata from the DADS when ADC or ODC data has been ingested into the ECS archives.	A: ancillary data from the ADC, to store in archive	S-DSS-04035	A	The SDSRV CI shall supply the Data Products listed in Appendix F of the current version of 304-CD-005 to the DDIST CI.
			S-DSS-04037	A	The SDSRV CI shall supply the Metadata associated with the Data Products listed in Appendix F of the current version of 304-CD-005 to the DDIST CI.
IMS-0890#B	The IMS shall provide the capability to receive the metadata from the DADS when ADC or ODC data has been ingested into the ECS archives.		S-DSS-04035	A	The SDSRV CI shall supply the Data Products listed in Appendix F of the current version of 304-CD-005 to the DDIST CI.
			S-DSS-04037	A	The SDSRV CI shall supply the Metadata associated with the Data Products listed in Appendix F of the current version of 304-CD-005 to the DDIST CI.
IMS-0900#B	The IMS shall provide an interface to the IPs for ordering data to be delivered directly to the user or to a DADS.	B: ECS REQUEST TO ASTER (IP) FOR PRODUCTS B: ASTER GDS interfaces to EDC DAAC only.	S-CLS-10220	B	The WKBCH CI shall allow users to formulate a Data Request based on the results of searching the inventory core metadata attributes and inventory product specific metadata attributes.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-0910#B	he IMS shall provide the capability to receive the metadata from the DADS, when IP data has been ingested into the EOSDIS archives.	B: ASTER GDS interfaces to EDC DAAC only.	S-CLS-10220	B	The WKBCH CI shall allow users to formulate a Data Request based on the results of searching the inventory core metadata attributes and inventory product specific metadata attributes.
			S-DSS-04035	A	The SDSRV CI shall supply the Data Products listed in Appendix F of the current version of 304-CD-005 to the DDIST CI.
			S-DSS-04037	A	The SDSRV CI shall supply the Metadata associated with the Data Products listed in Appendix F of the current version of 304-CD-005 to the DDIST CI.
IMS-0915#A	The IMS shall provide an interface to the Version 0 system for ordering data products to be delivered directly to the user, or as specified in ICDs.		S-CLS-15670	A	The WKBCH CI shall provide an interface for users to obtain data products from the V0 system.
IMS-0915#B	The IMS shall provide an interface to the Version 0 system for ordering data products to be delivered directly to the user, or as specified in ICDs.		S-CLS-15670	A	The WKBCH CI shall provide an interface for users to obtain data products from the V0 system.
			S-CLS-15660	B	The WKBCH CI shall be capable of receiving data products electronically.
			S-DMS-30350	B	The GTWAY CI shall have the capability to send Product Requests to the Version 0 IMS using Version 0 system protocols.
IMS-0920#B	The IMS shall provide the capability for users to construct and submit standing orders and one-time requests for processing of ECS data by pre-existing processes, which shall contain the following information at a minimum: a. Requester identification b. Algorithm input requirements c. Text description of need for processing d. Level 0-4 data set/subset e. Required time of generation f. Requested priority for product processing g. Resulting product type h. Processing parameters		S-CLS-11000	B	The WKBCH CI shall provide the capability to submit Subscription Requests for on-demand processing of ECS data by pre-existing processes.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-11130	B	The WK BCH CI shall provide the capability for authorized users to construct and submit Production Requests.
			S-DSS-01540	B	The SDSRV CI shall provide the capability to bundle notification of discrete events into a single notice to the subscriber.
			S-DSS-01620	B	The SDSRV CI shall validate that Subscription Update Requests specify a valid Subscription Identifier and a valid replacement Subscription.
			S-DSS-01700	B	The SDSRV CI shall periodically report on new events for timer-based Subscriptions and will not repeat notification of old events.
			S-DSS-04760	B	The SDSRV CI shall accept Subscription Requests from the client linked to a specified, existing DAR.
IMS-0925#B	The IMS shall provide the capability for users to construct a Product Order associated with a Product Processing Order.		S-CLS-10260	B	The WK BCH CI shall provide the capability for users to issue Data Requests for Data Products that are generated on demand.
IMS-0930#A	The IMS shall provide the capability to search metadata holdings for the purpose of identifying the product desired and the input data to be processed.		S-CLS-10720	A	Registered users shall be able to obtain ECS data and services via their corresponding interfaces in the WK BCH CI, provided that the users are authorized for the specific services and/or data.
			S-CLS-10750	A	The WK BCH CI shall provide users a search and results interface to search for and view Inventory information.
			S-DSS-04710	A	The SDSRV CI shall respond to a query with a null Result Set, if no products in the Inventory meet the specified criteria.
IMS-0930#B	The IMS shall provide the capability to search metadata holdings for the purpose of identifying the product desired and the input data to be processed.		S-CLS-10720	A	Registered users shall be able to obtain ECS data and services via their corresponding interfaces in the WK BCH CI, provided that the users are authorized for the specific services and/or data.
			S-CLS-10750	A	The WK BCH CI shall provide users a search and results interface to search for and view Inventory information.
			S-DSS-04710	A	The SDSRV CI shall respond to a query with a null Result Set, if no products in the Inventory meet the specified criteria.
			S-CLS-12480	B	The WK BCH CI shall provide the capability to request any of the services available for the individual items in the output of a Metadata search.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-13550	B	The WKBCH CI shall provide users the capability to search Production History on any combination of Production History Metadata attributes.
			S-DSS-04500	B	The SDSRV CI's MD Component shall have the ability to indicate the need for on-demand product generation as Metadata for science data.
IMS-0940#B	The IMS shall integrate the searching of metadata holdings for identifying information needed to complete a processing request into the request construction and submission process.		S-CLS-12530	B	The WKBCH CI shall provide users the capability to simultaneously view Search Results and Production Requests.
IMS-0950#B	The IMS shall accept from the originator changes to existing standing orders for data to be processed by the PGS.		S-CLS-11270	B	The WKBCH CI shall provide users the capability to terminate their Subscriptions for on demand processing.
			S-CLS-11280	B	The WKBCH CI shall provide users the capability to modify their Subscriptions for on demand processing.
IMS-0960#B	The IMS shall provide the capability to request priority processing of requested data.		S-CLS-11160	B	The WKBCH CI shall provide authorized users the capability to request priority processing of Production Requests.
IMS-0970#B	The IMS shall determine if requested data products already exist and can be retrieved.		S-CLS-11150	B	The WKBCH CI shall provide product delay notification to users to notify them when products will not be distributed within the estimated time.
IMS-0980#B	The IMS shall determine the necessary processing required to generate a requested product.		S-CLS-11000	B	The WKBCH CI shall provide the capability to submit Subscription Requests for on-demand processing of ECS data by pre-existing processes.
IMS-0990#A	The IMS shall determine if necessary lower level products exist for processing of the requested data product.		S-DSS-04710	A	The SDSRV CI shall respond to a query with a null Result Set, if no products in the Inventory meet the specified criteria.
IMS-0990#B	The IMS shall determine if necessary lower level products exist for processing of the requested data product.		S-DSS-04710	A	The SDSRV CI shall respond to a query with a null Result Set, if no products in the Inventory meet the specified criteria.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-1000#A	The IMS shall prepare, for output to the PGS, the Product Processing Order for specifying processing and data to be used in generating a product, which shall contain the following information at a minimum: a. Identification of the product(s) to be generated b. Identification of the expected time/time window of receipt of input products, and ancillary data c. Product processing priority d. Destination(s) of product output e. Suggested earliest start time f. Suggested latest completion time	A: Interface for Operations only.	S-PLS-00005	A	The PLANG CI shall accept priority Production Requests for the generation of specific Data Products.
			S-PLS-00010	A	The PLANG CI shall accept Production Requests for specific Data Products with associated time windows that are to be routinely generated.
IMS-1000#B	The IMS shall prepare, for output to the PGS, the Product Processing Order for specifying processing and data to be used in generating a product, which shall contain the following information at a minimum: a. Identification of the product(s) to be generated b. Identification of the expected time/time window of receipt of input products, and ancillary data c. Product processing priority d. Destination(s) of product output e. Suggested earliest start time f. Suggested latest completion time	B: On-Demand processing interface for users.	S-PLS-00005	A	The PLANG CI shall accept priority Production Requests for the generation of specific Data Products.
			S-PLS-00010	A	The PLANG CI shall accept Production Requests for specific Data Products with associated time windows that are to be routinely generated.
IMS-1005#A	The IMS shall forward, to the appropriate DADS, Product Orders for distribution of the products generated as a result of the Product Processing Order.		S-DSS-30010	A	The DDIST CI shall accept Electronic Distribution Requests or Media Distribution Requests.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-1005#B	The IMS shall forward, to the appropriate DADS, Product Orders for distribution of the products generated as a result of the Product Processing Order.		S-DSS-30010	A	The DDIST CI shall accept Electronic Distribution Requests or Media Distribution Requests.
			S-CLS-10260	B	The WKBCH CI shall provide the capability for users to issue Data Requests for Data Products that are generated on demand.
IMS-1010#B	he IMS shall accept from the PGS a processing status message to confirm or reject a processing order, which shall contain the following information at a minimum: a. Requester identification b. Request identification c. Request status d. If rejection, then the reason for the rejection e. If delayed longer than latest completion time specified by user, adjusted start and completion times.		S-CLS-11170	B	The WKBCH CI shall display to users a processing status message to confirm or reject a Production Request.
			S-PLS-00130	B	The PLANG CI shall send a response message to the Data Server confirming the acceptance status of the received Production Request for On-Demand Data Products ("accepted", "rejected", "deferred") and reason for rejection of a request (if applicable).
IMS-1020#B	The IMS shall prepare, for output to the SMC, a request for conflict adjudication in the event a processing conflict cannot be resolved between the IMS, the requester, and the PGS.		S-CLS-11190	B	The WKBCH CI shall provide the capability for users to submit a Conflict Adjudication Request to the SMC, in the event a processing conflict cannot be resolved between the SDSRV CI, the science user, and the Data Processing Subsystem.
IMS-1030#B	The IMS shall accept from the SMC and provide to the requester, conflict resolution, which shall contain the following information at a minimum: a. Request identification b. Data type c. Priority modifications d. Account balance modifications e. Information on when request will be serviced f. SMC contact point		S-CLS-11200	B	The WKBCH CI shall provide users a Conflict Adjudication Response from the SMC after submitting a Conflict Adjudication Request.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-15850	B	The WKBCH CI shall display conflict resolution information from the SMC.
			S-CLS-15860	B	Conflict resolution information shall contain request identification, data type, priority modifications, account balance modifications, information on when request will be serviced, and SMC contact point.
IMS-1040#B	The IMS shall, using information provided by the PGS, notify users when processing will not be completed within the estimated time, and provide the reason for the delay and modified arrival times.		S-CLS-11030	B	The WKBCH CI shall provide the capability for users to determine reprocessing status of products which are being reprocessed.
			S-CLS-11210	B	The WKBCH CI shall provide users a Notification when requests for data processing will not be completed within the estimated time.
IMS-1050#B	The IMS shall provide the capability to notify the user community if data has been reprocessed.		S-CLS-11030	B	The WKBCH CI shall provide the capability for users to determine reprocessing status of products which are being reprocessed.
IMS-1060#A	The IMS shall maintain a cross reference of processing performed, data sets produced, supporting data used, and data recipient.		S-DSS-01180	A	For each Data Request, the SDSRV CI shall log the processing performed, the Data Products produced, any supporting data used and the recipient of the data.
IMS-1060#B	The IMS shall maintain a cross reference of processing performed, data sets produced, supporting data used, and data recipient.		S-DSS-01180	A	For each Data Request, the SDSRV CI shall log the processing performed, the Data Products produced, any supporting data used and the recipient of the data.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-1070#B	The IMS shall provide the capability for users to construct DARS for collection of EOS data which shall contain the following information at a minimum: a. Observation number b. Experimenter identification c. Experimenter address d. Investigation identification e. Scientific discipline f. Observation repetition period g. Tolerance in observation time h. User priority i. Scheduling priority and target of opportunity flag j. Descriptive text k. Location data expressed in terms of longitude and latitude as earliest start coordinates and latest stop coordinates l. Earliest start time m. Latest stop time n. Minimum coverage required o. Maximum coverage desired p. Number of instruments involved in the investigation q. Which instruments are involved in the investigation		S-CLS-13790	B	The WKBCH CI shall provide users the capability to parameterize ASTER DARS with ASTER DAR Parameters.
			S-CLS-14400	B	Time-related data for DARS shall be synchronized so that selection of a time range on a DAR timeline tool will be translated into date/time ranges in a DAR submission window.
			S-CLS-14410	B	Time-related data for DARS shall be synchronized so that typing a date/time range in a DAR submission window will be graphically display as a blocked out time range on a DAR timeline window.
			S-CLS-14420	B	Geographic selection criteria for DARS shall be synchronized so that selection of an area on a DAR map display will be translated into lat/lon coordinates in a DAR submissions window.
			S-CLS-14430	B	Geographic selection criteria for DARS shall be synchronized so that typing lat/lon coordinates in a DAR submission window will be graphically displayed as a blocked out area on a DAR map display.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-1071#B	The IMS shall provide the capability for users to construct a Product Order associated with a Data Acquisition Request.		S-CLS-13800	B	The WKBCH CI shall provide the capability for users to construct a Subscription Request associated with a Data Acquisition Request.
			S-CLS-14450	B	The WKBCH CI shall provide the capability for users to construct a Product Request associated with a DAR.
IMS-1072#B	The IMS shall provide the capability for users to construct a Product Processing Order associated with a Data Acquisition Request.		S-CLS-13800	B	The WKBCH CI shall provide the capability for users to construct a Subscription Request associated with a Data Acquisition Request.
IMS-1080#A	The IMS shall accept requests for acquisition of data to be processed one time or as standing orders.		S-DSS-01530	A	The SDSRV CI shall provide the capability for Subscriptions to notify users via email or directly to a program interface.
			S-DSS-01630	A	The SDSRV CI shall provide the capability to notify a subscriber of QA changes.
			S-DSS-01640	A	The SDSRV CI shall provide the capability to notify a subscriber on individual data granule basis.
IMS-1080#B	The IMS shall accept requests for acquisition of data to be processed one time or as standing orders.		S-DSS-01530	A	The SDSRV CI shall provide the capability for Subscriptions to notify users via email or directly to a program interface.
			S-DSS-01630	A	The SDSRV CI shall provide the capability to notify a subscriber of QA changes.
			S-DSS-01640	A	The SDSRV CI shall provide the capability to notify a subscriber on individual data granule basis.
			S-CLS-13810	B	The WKBCH CI shall accept Service Requests for Subscriptions for data and metadata.
			S-DSS-01540	B	The SDSRV CI shall provide the capability to bundle notification of discrete events into a single notice to the subscriber.
			S-DSS-01620	B	The SDSRV CI shall validate that Subscription Update Requests specify a valid Subscription Identifier and a valid replacement Subscription.
			S-DSS-01700	B	The SDSRV CI shall periodically report on new events for timer-based Subscriptions and will not repeat notification of old events.
			S-DSS-04760	B	The SDSRV CI shall accept Subscription Requests from the client linked to a specified, existing DAR.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-10020	B	The DDSRV CI shall accept Subscriptions for metadata from the client.
IMS-1090#B	The IMS shall accept requests for changes to existing DARs from the requester and forward the changes to the ICC.		S-CLS-13820	B	The WKBCH CI shall accept Service Requests for changes to existing DARs from the science user.
IMS-1100#B	The IMS shall accept from the EOC the current data acquisition schedules and plans and make the data acquisition schedules and plans accessible to authorized users on request.		S-CLS-13840	B	The WKBCH CI shall display data acquisition schedules as timelines.
IMS-1105#B	The IMS shall maintain or provide access to climatology databases for DAR generation.				
IMS-1110#B	The IMS shall provide the capability to receive a product request from the user and determine the instrument(s) required for the data acquisition.		S-CLS-14450	B	The WKBCH CI shall provide the capability for users to construct a Product Request associated with a DAR.
IMS-1120#B	IMS shall provide the capability to receive a geophysical parameter specification from the user and determine the instrument(s) required for the data acquisition.		S-CLS-13850	B	The WKBCH CI shall provide users the capability to access the Guide during DAR formulation and submittal.
IMS-1130#B	The IMS shall provide descriptive information on instruments and parameters available in Standard Products to help with the creation of data acquisition requests.		S-CLS-13850	B	The WKBCH CI shall provide users the capability to access the Guide during DAR formulation and submittal.
IMS-1140#B	The IMS shall provide instrument specific graphic displays to help with the creation of data acquisition requests, which shall include at a minimum: a. Geographic reference aids b. Spacecraft location projections		S-CLS-13870	B	The WKBCH CI shall provide visualizations of ASTER instrument nominal view swaths and non-nominal view swaths based on user supplied angle as a reference aid to the creation of ASTER DARs.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-14420	B	Geographic selection criteria for DARs shall be synchronized so that selection of an area on a DAR map display will be translated into lat/lon coordinates in a DAR submissions window.
			S-CLS-14430	B	Geographic selection criteria for DARs shall be synchronized so that typing lat/lon coordinates in a DAR submission window will be graphically displayed as a blocked out area on a DAR map display.
			S-CLS-13860	B	The WKBCH CI shall provide EOS-AM spacecraft location projections as a reference aid to the creation of ASTER Data Acquisition Requests
IMS-1150#B	The IMS shall provide product specific help to identify instruments needed to create a product.		S-CLS-13850	B	The WKBCH CI shall provide users the capability to access the Guide during DAR formulation and submittal.
IMS-1160#B	The IMS shall provide instrument specific default settings for instrument configurable parameters.		S-CLS-13880	B	The WKBCH CI shall provide instrument specific default settings for DAR instrument configurable parameters.
IMS-1170#B	The IMS shall provide instrument specific help to assist with setting instrument parameters.		S-CLS-13850	B	The WKBCH CI shall provide users the capability to access the Guide during DAR formulation and submittal.
			S-CLS-13870	B	The WKBCH CI shall provide visualizations of ASTER instrument nominal view swaths and non-nominal view swaths based on user supplied angle as a reference aid to the creation of ASTER DARs.
			S-CLS-13880	B	The WKBCH CI shall provide instrument specific default settings for DAR instrument configurable parameters.
			S-CLS-13890	B	The WKBCH CI shall provide users the capability to view Valid Values for DAR Parameters.
			S-CLS-13900	B	The WKBCH CI shall constraint check and validate DAR Parameters.
IMS-1180#B	The IMS shall validate that user specified instrument settings are within the range of acceptable values.		S-CLS-13900	B	The WKBCH CI shall constraint check and validate DAR Parameters.
IMS-1190#B	The IMS shall validate DAR parameters against EOC and ICC provided constraints.		S-CLS-13890	B	The WKBCH CI shall provide users the capability to view Valid Values for DAR Parameters.
			S-CLS-13900	B	The WKBCH CI shall constraint check and validate DAR Parameters.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-20900	B	The DDICT CI shall maintain DAR parameters and DAR parameter constraints provided by EOC and External Instrument Operations Facilities (e.g. Landsat-7).
IMS-1195#B	The IMS shall validate DAR parameters against constraints provided by external instrument operations facilities (e.g. ASTER) as applicable and in accordance with applicable MOUs.		S-CLS-13890	B	The WKBCH CI shall provide users the capability to view Valid Values for DAR Parameters.
			S-CLS-13900	B	The WKBCH CI shall constraint check and validate DAR Parameters.
			S-DMS-20880	B	The DDICT CI shall have the capability to receive from the Data Administrator, Data Administration Requests
			S-DMS-20900	B	The DDICT CI shall maintain DAR parameters and DAR parameter constraints provided by EOC and External Instrument Operations Facilities (e.g. Landsat-7).
			S-DMS-23910	B	The Data Dictionary shall maintain ASTER DAR parameters and ASTER DAR parameter constraints provided by the ASTER instrument operations facilities.
IMS-1200#B	The IMS shall forward DARs for specific observational sequences generated by an authorized user to the ICC.		S-CLS-15990	B	The WKBCH CI shall send DARs for ASTER observational sequences to the ASTER GDS.
IMS-1210#B	The IMS shall forward the processing product orders associated with a DAR to the appropriate PGS.		S-CLS-13800	B	The WKBCH CI shall provide the capability for users to construct a Subscription Request associated with a Data Acquisition Request.
IMS-1220#B	The IMS shall forward, to the appropriate DADS, product orders for distribution of the products generated as a result of the DAR.		S-CLS-13800	B	The WKBCH CI shall provide the capability for users to construct a Subscription Request associated with a Data Acquisition Request.
IMS-1230#B	The IMS shall accept from the ICC and provide to the requester such information as data acquisition request confirmation or rejection, and notification of data acquisition request scheduling and completion, to include at a minimum: a. Date and time b. Instrument ID c. Data acquisition request ID d. Request status e. Implementation schedule f. If rejection, then the reason for the rejection		S-CLS-13920	B	The WKBCH CI shall provide DAR Disposition in response to the submittal of a DAR. This may be e-mail notification.
			S-DSS-04740	B	The SDSRV CI shall provide DAR status to the client, in response to DAR Status Requests.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-04770	B	The SDSRV CI shall send DAR Status Requests to ASTER ICC.
IMS-1240#B	The IMS shall be expandable to accept from the IP Information Management System or an equivalent IP facility the current data acquisition schedules and plans for U.S. instruments on foreign spacecraft, and shall make the schedules and plans accessible to authorized users on request, in accordance with applicable MOUs.	B: ASTER GDS interfaces to EDC DAAC only.	S-CLS-13930	B	The WKBCH CI shall be expandable to make accessible to authorized users the current data acquisition schedules and plans for U.S. instruments on foreign spacecraft for the IP Information Management System or an equivalent IP facility.
IMS-1250#B	The IMS shall be expandable to forward DARs for U.S. instruments on IP spacecraft to the IP Information Management System or an equivalent IP facility, in accordance with applicable MOUs.	B: ASTER GDS interfaces to EDC need to check with C. Chachulski. DAAC only.	S-CLS-13930	B	The WKBCH CI shall be expandable to make accessible to authorized users the current data acquisition schedules and plans for U.S. instruments on foreign spacecraft for the IP Information Management System or an equivalent IP facility.
IMS-1260#B	The IMS shall provide the capability to receive, from the IP Information Management System or an equivalent IP facility, data acquisition request status in accordance with applicable MOUs and provide the status to the data acquisition requester.	B: ASTER GDS interfaces to EDC DAAC only.	S-CLS-16000	B	The WKBCH CI shall provide a capability for users to request status of ASTER DARs.
			S-CLS-16010	B	The WKBCH CI shall be capable of displaying the status of ASTER DARs to the user.
IMS-1261#B	The IMS shall provide the capability to forward data acquisition requests to the ASTER GDS, in accordance with applicable IRDs and ICDs.		S-DSS-04720	B	The SDSRV CI shall provide DARs to ASTER ICC.
IMS-1262#B	The IMS shall provide the capability to receive the ASTER GDS data acquisition request status in accordance with applicable IRDs and ICDs and provide the status to the data acquisition requester.		S-DSS-04750	B	The SDSRV CI shall accept DAR Status from IPs
			S-DSS-04780	B	The SDSRV CI shall receive DAR Status from the ASTER ICC.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-1270#A	The IMS shall determine the ECS elements responsible for processing and distributing, and the input data required for processing using the product thread information provided by the SMC.				
IMS-1270#B	The IMS shall determine the ECS elements responsible for processing and distributing, and the input data required for processing using the product thread information provided by the SMC.		S-DSS-01000	B	The SDSRV CI operations staff shall have the capability to receive from the SMC, configuration management directives.
			S-DSS-01035	B	The SDSRV CI operations staff shall have the capability to receive from the SMC scheduling directives, and scheduling adjudication directives.
IMS-1280#A	The IMS shall send a product order, priority, and suggested start time and completion time to the ECS elements responsible for processing and distributing a product.		S-DSS-30010	A	The DDIST CI shall accept Electronic Distribution Requests or Media Distribution Requests.
IMS-1280#B	The IMS shall send a product order, priority, and suggested start time and completion time to the ECS elements responsible for processing and distributing a product.		S-DSS-30010	A	The DDIST CI shall accept Electronic Distribution Requests or Media Distribution Requests.
IMS-1290#A	The IMS shall send a product order to an ADC or an ODC with the identification of the destination DADS and suggested shipping deadline for data required for product processing.	This requirement is implemented by procedural agreements documented in the ECS/NOAA ADC IRD.			
IMS-1290#B	The IMS shall send a product order to an ADC or an ODC with the identification of the destination DADS and suggested shipping deadline for data required for product processing.		S-DMS-30350	B	The GTWAY CI shall have the capability to send Product Requests to the Version 0 IMS using Version 0 system protocols.
IMS-1300#A	The IMS shall be capable of responding to user inquiries for status of user-initiated requests, and user request history.		S-DSS-00110	A	The SDSRV CI shall provide operations staff the capability to determine the status of any or all existing Service Requests.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-00120	A	The SDSRV CI shall accept Status Requests from clients and, if requested, provide Service Request Status for any specifed pending Service Requests, in return.
			S-DSS-00130	A	The SDSRV CI shall accept Status Requests from clients and, if requested, provide Service Request Status for all pending Service Requests submitted by a specified user, in return.
			S-DSS-01140	A	The SDSRV CI shall provide the capability to list and status, Service Requests initiated by aclient.
IMS-1300#B	The IMS shall be capable of responding to user inquiries for status of user-initiated requests, and user request history.		S-DSS-00110	A	The SDSRV CI shall provide operations staff the capability to determine the status of any or all existing Service Requests.
			S-DSS-00120	A	The SDSRV CI shall accept Status Requests from clients and, if requested, provide Service Request Status for any specifed pending Service Requests, in return.
			S-DSS-00130	A	The SDSRV CI shall accept Status Requests from clients and, if requested, provide Service Request Status for all pending Service Requests submitted by a specified user, in return.
			S-DSS-01140	A	The SDSRV CI shall provide the capability to list and status, Service Requests initiated by aclient.
			S-CLS-11050	B	The WKBCH CI shall provide users the capability to obtain and review User Session Logs for their own sessions.
			S-CLS-11090	B	The WKBCH CI shall provide users the capability to display their account history.
			S-CLS-12670	B	The WKBCH CI shall provide users the capability to enable the logging of Service Requests, Service Request Status, and Notifications to the User Session Log.
			S-CLS-12680	B	The WKBCH CI shall provide users the capability to disable logging to the User Session Log.
			S-CLS-12690	B	The WKBCH CI shall provide users the capability to replay the User Session Log.
			S-CLS-12700	B	The WKBCH CI shall provide users the capability to obtain information about all their user sessions.
			S-CLS-13940	B	The WKBCH CI shall display DAR status when requested by users.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-13950	B	The WKBCH CI shall provide the user the capability to view the Data Requests recorded in the User Session Log.
			S-CLS-13960	B	The WKBCH CI shall provide the user the capability to view the DARs recorded in the User Session Log.
			S-CLS-14250	B	The WKBCH CI shall provide users the capability to issue a Status Request to determine the status of any active Service Request.
			S-DMS-00260	B	The LIMGR CI shall provide a capability to report status of Service Requests submitted to it.
			S-DMS-10140	B	The DIMGR CI shall provide a capability to report status of Search Requests submitted to it.
			S-DMS-10320	B	The DIMGR CI shall provide Service Request Status in response to Status Requests.
			S-DMS-30260	B	The GTWAY CI shall provide a capability to report the status of service requests submitted to it.
			S-DSS-00116	B	The SDSRV CI shall accept Search Status Requests for a specified active Search Request and, if requested, provide all Search Results accumulated since the last Search Status Request for that Search Request.
			S-DSS-01440	B	The SDSRV CI shall provide client Session Status Information to the requester.
			S-CLS-11040	B	The WKBCH CI shall provide users the capability to obtain data processing Status during the processing of a request initiated by the user.
IMS-1310#A	The IMS shall provide the capability to accept, from product requesters, product distribution status requests, retrieve the request status, and display the status to the requester for an ECS, ADC, or ODC data product.	At Release A, ECS will support this requirement by users contacting ops/user services who then utilize an ops MSS interface to obtain status.	C-MSS-77050	A	The MSS accountability management service shall be capable of interfacing with the SDPS subsystems to determine the status of an ordered data item to be: a. Request in queue for processing b. Request currently being processed c. Request successfully processed d. Error in request processing e. Error in request
IMS-1310#B	The IMS shall provide the capability to accept, from product requesters, product distribution status requests, retrieve the request status, and display the status to the requester for an ECS, ADC, or ODC data product.		S-CLS-11060	B	The WKBCH CI shall provide science users the capability to obtain Distribution Request Status for user-initiated Distribution Requests.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-14230	B	The DESKT CI shall provide the capability for a user to issue a Distribution Status Request for a previously submitted Distribution Request and receive Distribution Request Status as a result.
			S-CLS-14240	B	The DESKT CI shall issue periodic Distribution Status Requests for a user-specified Distribution Request, at time intervals specified by the user.
IMS-1320#B	The IMS shall provide the capability to accept, from data acquisition requesters, data acquisition status requests, retrieve the request status, and display the status to the requester.		S-CLS-13940	B	The WKBCH CI shall display DAR status when requested by users.
IMS-1330#B	The IMS shall provide the capability to accept, from data processing requesters, data processing status requests, retrieve the request status, and display the status to the requester.		S-CLS-11040	B	The WKBCH CI shall provide users the capability to obtain data processing Status during the processing of a request initiated by the user.
IMS-1340#B	The IMS shall, using information provided by the SMC, provide the capability for users to preview billing costs for EOSDIS data products prior to order submission.		S-CLS-13600	B	The WKBCH CI shall display the cost estimates for Data specified in Distribution Requests prior to the submission of the Search Request.
			S-CLS-13610	B	When users submit a Distribution Request, they shall be given an opportunity to review the total amount that will be billed for the order and affirm, cancel or modify the Search Request.
			C-MSS-78270	B	The MSS BAAS Billing and Invoicing function shall make available to the DSS, pricing algorithms it maintains in standard pricing tables, for the purposes of price estimation.
IMS-1350#B	The IMS shall provide the capability for users to preview billing costs, which are based upon MOUs with the ADC and non-EOSDIS data centers, prior to ADC and non-EOSDIS data product order submission.		S-CLS-10230	B	The WKBCH CI shall provide the capability for users to preview billing costs for non-EOSDIS Data Products prior to Data Request submission.
IMS-1360#B	The IMS shall provide the capability for users to request and receive the current status of their account balance.		C-MSS-75102	B	The Accountability Service shall have the capability to receive an account balance status request from the CLS.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-75145	B	The Accountability Service shall have the capability to send account status to the CLS.
			S-CLS-11080	B	The WKBCH CI shall provide the capability for users to request and receive their current account balance.
IMS-1370#B	The IMS shall present account status reports prepared by the SMC to requesters.		C-MSS-78540	B	The MSS BAAS Accounts Receivable (AR) function shall make account balance information available to science users upon a CLS request.
			S-CLS-11090	B	The WKBCH CI shall provide users the capability to display their account history.
IMS-1380#A	The IMS shall provide the capability to integrate the element toolkits with a common user interface.		S-CLS-00120	A	The DESKT CI shall provide for a common default color scheme for the user interface which may be customized by the user.
			S-CLS-00130	A	The DESKT CI shall provide for a standard ordering of menu items for the user interface.
			S-CLS-00140	A	The DESKT CI shall provide a standard widget set for building a user interface.
			S-DSS-30162	A	The DDIST CI custom GUIs shall conform to the guidelines in Version 5.1 of the ECS User Interface Style Guide.
			S-DSS-21311	A	The STMGT CI custom GUIs shall conform to the guidelines in Version 5.1 of the ECS User Interface Style Guide.
IMS-1380#B	The IMS shall provide the capability to integrate the element toolkits with a common user interface.		S-CLS-00120	A	The DESKT CI shall provide for a common default color scheme for the user interface which may be customized by the user.
			S-CLS-00130	A	The DESKT CI shall provide for a standard ordering of menu items for the user interface.
			S-CLS-00140	A	The DESKT CI shall provide a standard widget set for building a user interface.
			C-MSS-00540	B	To the maximum extent, the MSS Human Machine Interface (HMI) shall be compatible with the ECS User Interface Style Guide (Version 5.1).
			S-CLS-00640	B	The DESKT CI shall provide users the capability to obtain a description of the interaction between the Workbench and specified tools.
			S-DPS-21855	B	The PRONG CI GUI shall conform to the guidelines in version 5.1 of the ECS User Interface Style Guide.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DPS-21856	B	To the extent possible, the PRONG CI COTS GUI shall be configured to conform to the guidelines in version 5.1 of the ECS User Interface Style Guide.
			S-DPS-40835	B	The AITTL CI shall conform to the guidelines in version 5.1 of the ECS User Interface Style Guide.
			S-PLS-00457	B	The PLANG CI GUI shall conform to the guidelines in version 5.1 of the ECS User Interface Style Guide.
			S-PLS-00458	B	To the extent possible, the PLANG CI COTS GUI shall be configured to conform to the guidelines in version 5.1 of the ECS User Interface Style Guide.
IMS-1385#B	The IMS toolkit software shall be able to interactively display interrupt messages.		S-CLS-12800	B	The WKBCH CI shall provide a capability to interactively display interrupt messages.
IMS-1400#B	The Virtual IMS Information Management software shall operate with a local data base using an ECS supported DBMS provided by the SCF, thereby facilitating the process of importation of the local data base into the ECS.		S-DSS-01450	B	The SDSRV CI shall provide application programming interfaces capable of supporting the development of extensions for the addition of Metadata fields that are unique to the data maintained at a specific DAAC.
			S-DSS-21280	B	The SDSRV CI shall provide application programming interfaces (APIs) to support Insert Requests.
IMS-1410#B	The Virtual IMS Information Management software shall provide metadata management services for local SCF metadata.		S-DSS-01450	B	The SDSRV CI shall provide application programming interfaces capable of supporting the development of extensions for the addition of Metadata fields that are unique to the data maintained at a specific DAAC.
IMS-1420#B	The Virtual IMS Information Management software shall provide the capabilities to search the local SCF data base.		S-DSS-01450	B	The SDSRV CI shall provide application programming interfaces capable of supporting the development of extensions for the addition of Metadata fields that are unique to the data maintained at a specific DAAC.
IMS-1430#B	The Virtual IMS Information Management software shall provide local interactive and batch data management capabilities to: a. Add b. Update c. Delete d. Retrieve		S-DSS-03760	A	The SDSRV CI Schema Information shall include for each Data Type the structure of that Data Type.
			S-DSS-03770	A	The SDSRV CI Schema Information shall include for each Data Type the services available for that Data Type.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-03780	A	The SDSRV CI Schema Information shall include for each Data Type the Data Type Attributes for that Data Type and the Valid Values associated with each Data Type Attribute.
			S-DSS-00950	A	The SDSRV CI shall support the processing of Data Requests subject to access controls of read, write, update and delete, singly or in a any combination, based on data types.
			S-DSS-00960	A	The SDSRV CI shall support the processing of Data Requests subject to access controls of read, write, update and delete, singly or in a any combination, based on data ownership.
			S-DSS-01120	A	The SDSRV CI shall provide the capability to manage multiple Service Requests from clients.
			S-DSS-01130	A	The SDSRV CI shall provide the capability to process Service Requests asynchronously.
			S-DSS-00310	B	The SDSRV CI shall provide the capability for authorized clients to submit Service Requests batch mode.
IMS-1440#B	he Virtual IMS Information Management software shall provide local SCF data base administration utilities for, at a minimum: a. Modifying the data base schema b. Performance monitoring c. Administration of user access control d. Data base backup e. Data base recovery		S-DSS-00550	A	The SDSRV CI shall provide the capability for operations staff to view Schema Information.
			S-DSS-00570	A	The SDSRV CI shall provide the capability for operations staff to update Schema Information.
			S-DSS-03750	A	The SDSRV CI shall support Schema Information for each Data Type.
			S-DSS-00901	A	The SDSRV CI shall provide tools for database backup and restore.
			S-DSS-00770	B	The SDSRV CI shall utilize vendor supplied tools to analyze system CPU performance.
			S-DSS-00780	B	The SDSRV CI shall utilize vendor supplied tools to monitor the performance of query processing.
			S-DSS-00790	B	The SDSRV CI shall utilize vendor supplied tools to analyze system storage performance.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-00800	B	The SDSRV CI shall utilize vendor supplied tools to tune system throughput performance.
			S-DSS-00810	B	The SDSRV CI shall utilize vendor supplied tools to analyze system throughput performance.
			S-DSS-01360	B	The SDSRV CI shall, in the event of a restart after a processing failure, recover the state of all Service Requests, including the rollback of all incomplete Data Base Transactions, and the recovery of all complete Data Base Transactions.
IMS-1450#B	The Virtual IMS Information Management tools shall provide the capability to modify the data base structure while adhering to established standards.		S-DSS-03410	B	The SDSRV CI shall verify compliance of scientist provided Metadata with EOSDIS defined standards for Metadata content and structure (not scientific content).
IMS-1460#B	The Virtual IMS Information Management software shall provide the capability to electronically load data base structures and their content.		S-DSS-00760	B	The SDSRV CI shall provide application program interfaces to all the operator functions.
IMS-1470#B	The Virtual IMS Information Management software data base management system shall provide, at a minimum, the capability to select data for retrieval by: a. Boolean operators b. Relational operators c. Attribute values d. Combinations thereof		S-CLS-10050	A	The WKBCH CI shall support query of geographic Metadata by data element content criteria specified in Metadata.
			S-CLS-10110	A	The WKBCH CI shall support an exact word matching criteria for query of alpha-numeric non-geographic Metadata.
			S-CLS-10160	B	The WKBCH CI shall support logical and boolean operators matching criteria for query of alpha-numeric non-geographic Metadata.
IMS-1480#B	The Virtual IMS Information Management software shall allow a user to locate and identify desired data without having detailed knowledge of the systems: a. Architecture b. Data base management system c. Data base structure d. Query languages e. Data formats		S-CLS-12910	A	The user interface shall not require changes as a result of restructuring any of the data bases provided by the SDSRV CI.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-1490#A	The IMS toolkit software shall provide users, including those working from ICCs and ISTs, with the capability to locally construct the requests for IMS services, forward the requests to the IMS server, and obtain request results.		S-CLS-10710	A	The WKBCH CI shall provide the registered user the capability to obtain ECS data and services.
IMS-1490#B	The IMS toolkit software shall provide users, including those working from ICCs and ISTs, with the capability to locally construct the requests for IMS services, forward the requests to the IMS server, and obtain request results.		S-CLS-10710	A	The WKBCH CI shall provide the registered user the capability to obtain ECS data and services.
IMS-1500#A	The IMS toolkit software shall provide the tools to support user preparation or automated generation of metadata, for example, directory, inventory, and guide (documentation/reference material) entries.		S-CLS-11295	A	The WKBCH CI shall provide users the capability to create and submit Advertisements.
IMS-1500#B	The IMS toolkit software shall provide the tools to support user preparation or automated generation of metadata, for example, directory, inventory, and guide (documentation/reference material) entries.		S-CLS-11295	A	The WKBCH CI shall provide users the capability to create and submit Advertisements.
IMS-1505#B	The IMS toolkit software shall provide the tools to simulate an on-line IMS session for training sessions.		S-CLS-10640	B	The Training option shall consist of simulated user sessions for identifying, searching for and obtaining data and services.
IMS-1510#A	The IMS data visualization toolkit capabilities shall be portable and execute on ECS supported workstations and appropriate ECS facility computers.		S-CLS-10390	A	The WKBCH CI binaries that run on ECS supported workstations shall be publicly available.
			S-CLS-15680	A	The WKBCH CI executables shall run on the following hosts: a. SGI IRIX 5.3 b. HP UX 9.05 c. SUN Solaris 2.4 d. IBM RS/6000 AIX 3.2.5

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-01490	A	The DESKT CI executables shall run on the following hosts: a. SGI IRIX 5.3 b. HP UX 9.05 c. SUN Solaris 2.4 d. IBM RS/6000 AIX 3.2.5
IMS-1510#B	The IMS data visualization toolkit capabilities shall be portable and execute on ECS supported workstations and appropriate ECS facility computers.		S-CLS-10390	A	The WKBCH CI binaries that run on ECS supported workstations shall be publicly available.
			S-CLS-15680	A	The WKBCH CI executables shall run on the following hosts: a. SGI IRIX 5.3 b. HP UX 9.05 c. SUN Solaris 2.4 d. IBM RS/6000 AIX 3.2.5
			S-CLS-01490	A	The DESKT CI executables shall run on the following hosts: a. SGI IRIX 5.3 b. HP UX 9.05 c. SUN Solaris 2.4 d. IBM RS/6000 AIX 3.2.5
			S-CLS-01492	B	The DESKT CI executables shall run on the following hosts: a. DEC Digital Unix 4.0 b. HP UX 10.01 c. SGI IRIX 6.2 (64 bit) d. IBM RS/6000 AIX 4.1
			S-CLS-15682	B	The WKBCH CI executables shall run on the following hosts: a. DEC Digital Unix 4.0 b. HP UX 10.01 c. SGI IRIX 6.2 (64 bit) d. IBM RS/6000 AIX 4.1

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-1520#A	The IMS toolkit software shall provide data visualization tools to assist the investigators to perform the following functions, at a minimum: a. QA/Validation of products generated by the PGS b. Algorithm development c. Calibration functions, parameter verification, and anomaly detection d. View subsetted, subsampled, and summarized data whenever associated inventory information is displayed	A: Display two-dimensional data arrays as pseudocolor images.	S-CLS-10570	A	The WKBCH CI shall produce visualizations of images needed for QA, validation, Algorithm development, calibration functions, parameter verification and anomaly detection.
			S-CLS-10580	A	The WKBCH CI shall produce visualizations of multi-dimensional arrays needed for QA, Validation, Algorithm development, calibration functions, parameter verification and anomaly detection.
			S-CLS-10590	A	The WKBCH CI shall produce visualizations of tables of numbers needed for QA, Validation, Algorithm development, calibration functions, parameter verification and anomaly detection.
IMS-1520#B	The IMS toolkit software shall provide data visualization tools to assist the investigators to perform the following functions, at a minimum: a. QA/Validation of products generated by the PGS b. Algorithm development c. Calibration functions, parameter verification, and anomaly detection d. View subsetted, subsampled, and summarized data whenever associated inventory information is displayed		S-CLS-13980	B	The WKBCH CI shall provide a legend describing the display of a Data Product, in each window in which a Data Product is displayed.
			S-DMS-01060	B	The LIMGR CI shall forward commands to terminate a session to all servers which are a part of that session.
			S-DMS-11060	B	The DIMGR CI shall forward commands to terminate a session to all servers which are a part of that session.
			S-CLS-10570	A	The WKBCH CI shall produce visualizations of images needed for QA, validation, Algorithm development, calibration functions, parameter verification and anomaly detection.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-10580	A	The WKBCH CI shall produce visualizations of multi-dimensional arrays needed for QA, Validation, Algorithm development, calibration functions, parameter verification and anomaly detection.
			S-CLS-10590	A	The WKBCH CI shall produce visualizations of tables of numbers needed for QA, Validation, Algorithm development, calibration functions, parameter verification and anomaly detection.
IMS-1530#A	The IMS data visualization toolkit shall provide the capability to visualize data in raster and vector formats and to visualize animated products.	A: Display 8-bit and 24-bit raster images, Latitude/Longitude pairs	S-CLS-10330	A	The WKBCH CI shall provide users the capability of displaying 8-bit raster images.
			S-CLS-10340	A	The WKBCH CI shall provide users the capability of displaying 24-bit raster images.
			S-CLS-10350	A	The WKBCH CI shall provide users the option to display a series of Latitude/Longitude pairs as lines, displayed in their proper geolocation on top of all visualizations produced by the WKBCH CI.
			S-CLS-10360	A	The WKBCH CI shall provide users the capability to display browse information in table format.
			S-CLS-10370	A	The WKBCH CI shall provide users the capability to display browse information in text format.
			S-CLS-10380	A	The WKBCH CI shall provide users the capability to produce an animation of a browse movie loop.
			S-CLS-10400	A	The WKBCH CI shall provide users the option to display a series of visualizations as an animation.
IMS-1530#B	The IMS data visualization toolkit shall provide the capability to visualize data in raster and vector formats and to visualize animated products.		S-CLS-10330	A	The WKBCH CI shall provide users the capability of displaying 8-bit raster images.
			S-CLS-10340	A	The WKBCH CI shall provide users the capability of displaying 24-bit raster images.
			S-CLS-10350	A	The WKBCH CI shall provide users the option to display a series of Latitude/Longitude pairs as lines, displayed in their proper geolocation on top of all visualizations produced by the WKBCH CI.
			S-CLS-10360	A	The WKBCH CI shall provide users the capability to display browse information in table format.
			S-CLS-10370	A	The WKBCH CI shall provide users the capability to display browse information in text format.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-10380	A	The WKBCH CI shall provide users the capability to produce an animation of a browse movie loop.
			S-CLS-10400	A	The WKBCH CI shall provide users the option to display a series of visualizations as an animation.
			S-CLS-10320	B	The WKBCH CI shall provide users the option to display Latitude/Longitude pairs as symbols, displayed in their proper geolocation on all visualizations produced by the WKBCH CI.
			S-CLS-10460	B	The WKBCH CI shall provide users Lat/Long lists for the production of built-in vector overlays as part of the application.
			S-CLS-10470	B	The WKBCH CI shall provide users the capability to display browse information in vector graphic format.
			S-CLS-13620	B	The WKBCH CI shall provide the capability to visualize Data Products as continuous forward animation.
			S-CLS-13630	B	The WKBCH CI shall provide the capability to visualize Data Products as single step forward animation.
			S-CLS-13640	B	The WKBCH CI shall provide the capability to visualize Data Products as single step backward animation.
			S-CLS-13650	B	The WKBCH CI shall provide the capability to visualize Data Products as oscillating animation (i.e., continuous forward then continuous backward, alternating throughout the loop until user-directed termination).
IMS-1540#A	The IMS toolkit software shall provide the capability to generate, at a minimum: a. Two-dimensional plots (x-y plots, scatter plots, profiles, histograms) b. Three-dimensional plots c. Contour plots d. Three-dimensional surface diagrams	A: Two-dimensional color scatter plots, two-dimensional data arrays as pseudocolor images.	S-CLS-10410	A	The WKBCH CI shall provide the capability of displaying ECS supported visualization data as a two-dimensional color scatter plot.
			S-CLS-10430	A	The WKBCH CI shall provide the capability of displaying two-dimensional data arrays as pseudocolor images.
IMS-1540#B	The IMS toolkit software shall provide the capability to generate, at a minimum: a. Two-dimensional plots (x-y plots, scatter plots, profiles, histograms) b. Three-dimensional plots c. Contour plots d. Three-dimensional surface diagrams		S-CLS-10410	A	The WKBCH CI shall provide the capability of displaying ECS supported visualization data as a two-dimensional color scatter plot.
			S-CLS-10430	A	The WKBCH CI shall provide the capability of displaying two-dimensional data arrays as pseudocolor images.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-10480	B	The WKBCH CI shall provide the capability of displaying ECS supported visualization data as a series of lineplots.
			S-CLS-10490	B	The WKBCH CI shall provide the capability of displaying a horizontal or vertical profile through a pseudocolor image.
			S-CLS-10500	B	The WKBCH CI shall provide the capability of displaying multi-dimensional arrays of data as a series of two-dimensional pseudocolor images.
IMS-1550#A	The IMS toolkit data visualization tools shall provide capabilities for image manipulation (e.g., pan, zoom, color, contrast).	A: Selecting color, zooming and panning for pseudocolor visualizations; zooming and panning for raster images.	S-CLS-10420	A	The WKBCH CI shall provide the capability of selecting different color palettes for the pseudocolor visualizations.
			S-CLS-10440	A	The WKBCH CI shall provide the capability of zooming and panning pseudocolor visualizations of data.
			S-CLS-10450	A	The WKBCH CI shall provide the capability of zooming and panning raster images.
IMS-1550#B	The IMS toolkit data visualization tools shall provide capabilities for image manipulation (e.g., pan, zoom, color, contrast).		S-CLS-10420	A	The WKBCH CI shall provide the capability of selecting different color palettes for the pseudocolor visualizations.
			S-CLS-10440	A	The WKBCH CI shall provide the capability of zooming and panning pseudocolor visualizations of data.
			S-CLS-10450	A	The WKBCH CI shall provide the capability of zooming and panning raster images.
			S-CLS-10510	B	The WKBCH CI shall provide the capability of importing color palettes.
			S-CLS-10520	B	The WKBCH CI shall provide the capability for modifying the color palette.
			S-CLS-10530	B	The WKBCH CI shall provide the capability of modifying the pseudocolor mapping by changing the data min/max values.
			S-CLS-10540	B	The WKBCH CI shall provide the capability of modifying the pseudocolor mapping by adaptive equalization.
			S-CLS-13660	B	The WKBCH CI shall provide users the capability to change the minimum/maximum values of the color tables for visualization of Data Products.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-CLS-13670	B	The WKBCH CI shall provide users the capability to modify color palettes for visualization of Data Products.
IMS-1570#B	The IMS toolkit software shall provide statistical analysis capabilities.		S-CLS-10550	B	The WKBCH CI shall provide users the capability of calculating summarizing statistics of multi-dimensional arrays of EOS data.
			S-CLS-10560	B	The WKBCH CI shall provide the capability of calculating summarizing statistics of user-selected columns from tables of values of EOS data.
IMS-1590#B	The IMS toolkit data visualization tools shall provide capabilities for sizing and positioning the cursor by: a. Earth coordinates b. Image coordinates c. Instrument scan-line coordinated	B: Support image reprojections	S-CLS-10310	B	The WKBCH CI shall provide users the capability of positioning the cursor by entering an image X,Y coordinate.
			S-CLS-10600	B	The WKBCH CI shall display the Latitude and Longitude coordinates of the cursor, when the cursor is inside an EOS Grid array.
			S-CLS-10610	B	The WKBCH CI shall provide users the capability of positioning the cursor by entering a Latitude/Longitude value.
			S-CLS-10615	B	The WKBCH CI shall provide users the capability of positioning the cursor by entering instrument scan line.
IMS-1600#A	The IMS shall provide access to the following communication services at a minimum: a. File transfer b. Multi media mail c. Remote log-on d. Electronic Bulletin Board e. Access to other networks	A: b - x.400 support multi-media	S-CLS-13310	A	The WKBCH CI shall provide access to ESN file transfer communication services.
			S-CLS-13320	A	The WKBCH CI shall provide access to ESN remote log-on communication services.
			S-CLS-13330	A	The WKBCH CI shall provide access to ESN multi-media mail communication services.
			S-CLS-13340	A	The WKBCH CI shall provide access to ESN access to other networks.
			S-CLS-13350	A	The WKBCH CI shall provide access to an ESN Electronic Bulletin board.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-1600#B	The IMS shall provide access to the following communication services at a minimum: a. File transfer b. Multi media mail c. Remote log-on d. Electronic Bulletin Board e. Access to other networks		S-CLS-13310	A	The WKBCH CI shall provide access to ESN file transfer communication services.
			S-CLS-13320	A	The WKBCH CI shall provide access to ESN remote log-on communication services.
			S-CLS-13330	A	The WKBCH CI shall provide access to ESN multi-media mail communication services.
			S-CLS-13340	A	The WKBCH CI shall provide access to ESN access to other networks.
			S-CLS-13350	A	The WKBCH CI shall provide access to an ESN Electronic Bulletin board.
			S-CLS-01360	B	The DESKT CI shall provide users the capability to mail desktop objects
			S-CLS-13352	B	The WKBCH CI shall provide access to USENET newsgroups.
IMS-1620#A	The IMS element shall collect the management data used to support the following system management functions: a. Fault Management b. Configuration Management d. Accountability Management e. Performance Management f. Security Management g. Scheduling Management.	A: Security management data	C-MSS-10200	A	The MSS shall interface with the SDPS subsystems to exchange the data items in Table 5.1-2 as specified in the ECS internal ICDs, 313-DV3-003.
			S-IOS-00380	A	The ADSRV CI shall collect management data about its own operations for support of security management.
			S-IOS-00490	A	The ADSRV CI shall send detected hardware and software fault information to MSS.
			S-IOS-00510	A	The ADSRV CI shall report Accountability Management Data (such as searches, advertisement submissions, etc.) to the MSS.
			S-IOS-00515	A	The ADSRV CI shall collect Performance Management Data using the MSS managed object components and provide it to the MSS at configurable intervals and on demand.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-IOS-00517	B	The ADSRV CI shall provide to MSS configuration information such as expected moderation approval time, which will be used by MSS to compare plans to actuals (i.e. schedule management).
			S-IOS-00518	A	The ADSRV CI shall provide configuration management data such as software versions to MSS using managed process framework.
			S-DSS-00821	A	The SDSRV CI shall collect and provide Fault Management data to the MSS using a MSS provided Fault Management API.
IMS-1620#B	The IMS element shall collect the management data used to support the following system management functions: a. Fault Management b. Configuration Management c. Accounting Management d. Accountability Management e. Performance Management f. Security Management g. Scheduling Management		S-IOS-60360	B	The ADSHW CI shall accept and process lifecycle commands from the MSS.
			S-IOS-00380	A	The ADSRV CI shall collect management data about its own operations for support of security management.
			S-DMS-00710	B	The LIMGR CI shall report Accountability Management Data (requests such as searches, browse requests, orders) to the MSS.
			S-DMS-10560	B	The DIMGR CI shall report Accountability Management Data (requests such as searches, browse requests, orders) to the MSS.
			S-DMS-20840	B	The DDICT CI shall report Accountability Management Data (requests such as searches, browse requests, orders) to the MSS.
			S-DMS-31050	B	The GTWAY CI shall report Accountability Management Data (requests such as searches, browse requests, orders) to the MSS.
			S-DMS-20820	B	The DDICT CI shall provide detected hardware and software fault information to MSS.
			S-DMS-00520	B	The LIMGR CI shall send detected hardware and software fault information to MSS.
			S-DMS-10530	B	The DIMGR CI shall send detected hardware and software fault information to MSS.
			S-DMS-31051	B	The GTWAY CI shall send detected hardware and software fault information to MSS.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-00690	B	The LIMGR CI shall provide configuration management data such as software versions to MSS through the use of managed process framework.
			S-DMS-10540	B	The DIMGR CI shall provide configuration management data such as software versions to MSS through managed process framework.
			S-DMS-20830	B	The DDICT CI shall provide configuration management data such as software versions to the MSS using the managed process framework.
			S-DMS-31052	B	The GTWAY CI shall provide configuration management data such as software versions to MSS using managed process framework.
			S-DMS-00700	B	The LIMGR CI shall support the MSS in collecting Accounting Management Data by supplying resource utilization data.
			S-DMS-10550	B	The DIMGR CI shall support the MSS in collecting Accounting Management Data by supplying resource utilization data.
			S-DMS-31056	B	The GTWAY CI shall support the MSS in collecting Accounting Management Data by supplying resource utilization data.
			S-DMS-00720	B	The LIMGR CI shall collect Performance Management Data using the MSS managed object components and provide it to the MSS at configurable intervals and on demand.
			S-DMS-10570	B	The DIMGR CI shall collect Performance Management Data using the MSS managed object components and provide it to the MSS at configurable intervals and on demand.
			S-DMS-20850	B	The DDICT CI shall collect Performance Management Data using the MSS managed object components and provide it to the MSS at configurable intervals and on demand.
			S-DMS-00530	B	The LIMGR CI shall collect Security Management Data (such as rejected access to a service) and provide it to the MSS.
			S-DMS-31053	B	The GTWAY CI shall collect Performance Management Data using the MSS managed object components and provide it to the MSS at configurable intervals and on demand.
			S-DMS-10580	B	The DIMGR CI shall collect Security Management Data (such as rejected access to a service) and provide it to the MSS.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-20660	B	The DDICT CI shall collect Security Management Data (such as rejected access to a service) and provide it to the MSS.
			S-DMS-31054	B	The GTWAY CI shall collect Security Management Data (such as rejected access to a service) and provide it to the MSS.
			S-DMS-00730	B	The LIMGR CI shall provide to MSS configuration information such as number of expected daily sessions, which will be used by MSS to compare plans to actuals (i.e. schedule management).
			S-DMS-10590	B	The DIMGR CI shall provide to MSS configuration information such as number of expected daily sessions, which will be used by MSS to compare plans to actuals (i.e. schedule management).
			S-DMS-20860	B	The DDICT CI shall provide to MSS configuration information such as number of expected daily sessions, which will be used by MSS to compare plans to actuals (i.e. schedule management).
			S-DMS-31057	B	The GTWAY CI shall provide to MSS configuration information such as number of expected daily sessions, which will be used by MSS to compare plans to actuals (i.e. schedule management).
			S-IOS-00490	A	The ADSRV CI shall send detected hardware and software fault information to MSS.
			S-IOS-00510	A	The ADSRV CI shall report Accountability Management Data (such as searches, advertisement submissions, etc.) to the MSS.
			S-IOS-00515	A	The ADSRV CI shall collect Performance Management Data using the MSS managed object components and provide it to the MSS at configurable intervals and on demand.
			S-IOS-00516	B	The ADSRV CI shall support the MSS in collecting Accounting Management Data by supplying resource utilization data.
			S-IOS-00517	B	The ADSRV CI shall provide to MSS configuration information such as expected moderation approval time, which will be used by MSS to compare plans to actuals (i.e. schedule management).
			S-IOS-00518	A	The ADSRV CI shall provide configuration management data such as software versions to MSS using managed process framework.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-00821	A	The SDSRV CI shall collect and provide Fault Management data to the MSS using a MSS provided Fault Management API.
			S-DSS-00822	B	The SDSRV CI shall collect and provide Configuration Management data to the MSS using a MSS provided Configuration Management API.
			S-DSS-00823	B	The SDSRV CI shall collect and provide Accounting Management data to the MSS using a MSS provided Accounting Management API.
			S-DSS-00824	B	The SDSRV CI shall collect and provide Accountability Management data to the MSS using a MSS provided Accountability Management API.
			S-DSS-00825	B	The SDSRV CI shall collect and provide Performance Management data to the MSS using a MSS provided Performance Management API.
			S-DSS-00826	B	The SDSRV CI shall collect and provide Security Management data to the MSS using a MSS provided Security Management API.
			S-DSS-00827	B	The SDSRV CI shall collect and provide Scheduling Management data to the MSS using a MSS provided Scheduling Management API.
IMS-1630#B	The IMS shall provide the capability to receive from the SMC, directives to include at a minimum: a. Directives for integration, testing, and simulation b. Maintenance directives c. Configuration management directives d. Logistics management directives e. Training management directives f. Fault management directives g. Security directives		S-DMS-01080	B	The LIMGR CI shall provide a capability to display SMC directives to operator personnel.
			S-DMS-10390	B	The DIMGR CI shall provide the capability to receive maintenance directives from the SMC.
			S-DMS-10400	B	The DIMGR CI shall provide the capability to receive, directives for integration, testing, and simulation from the SMC.
			S-DMS-10410	B	The DIMGR CI shall provide the capability to receive, configuration management directives from the SMC.
			S-DMS-10420	B	The DIMGR CI shall provide the capability to receive logistics management directives from the SMC.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-10430	B	The DIMGR CI shall provide the capability to receive fault management directives from the SMC.
			S-DMS-10440	B	The DIMGR CI shall provide the capability to receive security directives from the SMC.
			S-DMS-10450	B	The DIMGR CI shall provide the capability to receive training management directives from the SMC.
			S-DMS-20735	B	The DDICT CI shall provide the capability to receive maintenance directives from the SMC.
			S-DMS-20740	B	The DDICT CI shall provide the capability to receive directives for integration, testing, and simulation from the SMC.
			S-DMS-20750	B	The DDICT CI shall provide the capability to receive configuration management directives from the SMC.
			S-DMS-20760	B	The DDICT CI shall provide the capability to receive logistics management directives from the SMC.
			S-DMS-20770	B	The DDICT CI shall provide the capability to receive fault management directives from the SMC.
			S-DMS-20780	B	The DDICT CI shall provide the capability to receive security directives from the SMC.
			S-DMS-20790	B	The DDICT CI shall provide the capability to receive training management directives from the SMC.
			S-DSS-00990	B	The SDSRV CI operations staff shall have the capability to receive from the SMC, directives for integration, testing, and simulation.
			S-DSS-01000	B	The SDSRV CI operations staff shall have the capability to receive from the SMC, configuration management directives.
			S-DSS-01010	B	The SDSRV CI operations staff shall have the capability to receive from the SMC, logistics management directives.
			S-DSS-01020	B	The SDSRV CI operations staff shall have the capability to receive from the SMC fault management directives.
			S-DSS-01030	B	The SDSRV CI operations staff shall have the capability to receive from the SMC security directives.
			S-DSS-01050	B	The SDSRV CI operations staff shall have the capability to receive training management directives from the SMC.
			S-IOS-00960	B	The ADSRV CI shall provide a capability to display SMC directives to operator personnel.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-00610	B	The LIMGR CI operations staff shall have the capability to receive maintenance directives from the SMC.
			S-DMS-00620	B	The LIMGR CI operations staff shall have the capability to receive directives for integration, testing, and simulation from the SMC.
			S-DMS-00630	B	The LIMGR CI operations staff shall have the capability to receive configuration management directives from the SMC.
			S-DMS-00640	B	The LIMGR CI operations staff shall have the capability to receive logistics management directives from the SMC.
			S-DMS-00650	B	The LIMGR CI operations staff shall have the capability to receive fault management directives from the SMC.
			S-DMS-00660	B	The LIMGR CI operations staff shall have the capability to receive security directives from the SMC.
			S-DMS-00670	B	The LIMGR CI operations staff shall have the capability to receive training management directives from the SMC.
			S-DSS-00980	B	The SDSRV CI operations staff shall have the capability to receive from the SMC, management directives.
IMS-1640#B	The IMS shall provide to the SMC, status to include at a minimum: a. Integration, testing, and simulation status b. Maintenance status c. Logistics status d. Training information		C-MSS-75165	B	The Accountability Service shall have the capability to receive TDRSS schedule requests from the DSS.
			S-DMS-00570	B	The LIMGR CI shall provide integration, testing, and simulation status to the SMC.
			S-DMS-00580	B	The LIMGR CI shall provide maintenance status to the SMC.
			S-DMS-00590	B	The LIMGR CI shall provide logistics status to the SMC.
			S-DMS-00600	B	The LIMGR CI shall provide training information to the SMC.
			S-DMS-10350	B	The DIMGR CI shall provide integration, testing, and simulation status to the SMC.
			S-DMS-10360	B	The DIMGR CI shall provide maintenance status to the SMC.
			S-DMS-10370	B	The DIMGR CI shall provide logistics status to the SMC.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-10380	B	The DIMGR CI shall provide training information to the SMC.
			S-DMS-20700	B	The DDICT CI shall provide integration, testing, and simulation status to the SMC.
			S-DMS-20710	B	The DDICT CI shall provide maintenance status to the SMC.
			S-DMS-20720	B	The DDICT CI shall provide logistics status to the SMC.
			S-DMS-20730	B	The DDICT CI shall provide training information to the SMC.
			S-DSS-00920	B	The SDSRV CI shall provide Logistics Status to the SMC.
			S-DSS-00930	B	The SDSRV CI shall provide training information to the SMC.
			S-DSS-01040	B	The SDSRV CI operations staff shall provide integration, testing, and simulation status to the SMC.
			S-IOS-00940	B	The ADSRV CI shall provide its current mode to MSS on request.
			S-IOS-00950	B	The ADSRV CI shall provide a capability for logistics and maintenance status to be provided to the SMC.
			S-DMS-31058	B	The GTWAY CI shall provide integration, testing, and simulation status to the MSS.
			S-DMS-31059	B	The GTWAY CI shall provide maintenance status to the MSS.
			S-DMS-31062	B	The GTWAY CI shall provide logistics status to the SMC.
			S-DMS-31061	B	The GTWAY CI shall provide training information to the SMC.
			S-DMS-00912	B	The LIMGR CI shall log the startup of the LIMGR servers to MSS.
			S-DMS-00913	B	The LIMGR CI shall log the shutdown of the LIMGR servers to MSS.
			S-DMS-10595	B	The DIMGR CI shall log the startup of the DIMGR servers to MSS.
			S-DMS-10596	B	The DIMGR CI shall log the shutdown of the DIMGR servers to MSS.
			S-DMS-31011	B	The GTWAY CI shall log the startup of the GTWAY servers to MSS.
			S-DMS-31012	B	The GTWAY CI shall log the shutdown of the GTWAY servers to MSS.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-20866	B	The DDICT CI shall log the startup of the DDICT servers to MSS.
			S-DMS-20867	B	The DDICT CI shall log the shutdown of the DDICT servers to MSS.
IMS-1645#A	The IMS shall accept from the users and output to the SMC, user feedback information, which shall contain the following at a minimum: a. Product data quality assessment b. Schedule performance assessment c. Evaluation of quality of ECS service	A: User comments only.	S-CLS-14040	A	The WKBCH CI shall automatically add the date, time and client release version identification to User Comments.
			S-CLS-14045	A	The WKBCH CI shall accept user feedback information and send this information to User Services.
IMS-1645#B	The IMS shall accept from the users and output to the SMC, user feedback information, which shall contain the following at a minimum: a. Product data quality assessment b. Schedule performance assessment c. Evaluation of quality of ECS service		S-CLS-01570	A	Users shall be able to enter User Comments in a comments window directly accessible from any open window on the users desktop.
			C-MSS-75112	B	The Accountability Service shall have the capability to receive user comment information from the CLS.
			S-CLS-11110	B	The WKBCH CI shall accept from the users user feedback information, on schedule performance assessment and output it to the SMC.
			S-CLS-11120	B	The WKBCH CI shall accept from the users user feedback information, on ECS service quality evaluation and output it to the SMC.
			S-CLS-14200	B	The WKBCH CI shall provide the capability to retrieve User Comments based on author, subject and date/time.
			S-CLS-14040	A	The WKBCH CI shall automatically add the date, time and client release version identification to User Comments.
			S-CLS-11100	B	The WKBCH CI shall accept from the users user feedback information, on product data quality assessment and output it to the DAAC originating the data.
			S-CLS-14210	A	The WKBCH CI shall forward User Comments to the user's home DAAC.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-1646#A	The IMS shall provide to the SMC a record of data orders for the purposes of maintaining a full and complete history of all data orders.		S-DSS-30288	A	The DDIST CI shall forward the Distribution Activity Log entries to the SMC.
IMS-1646#B	The IMS shall provide to the SMC a record of data orders for the purposes of maintaining a full and complete history of all data orders.		S-DSS-30288	A	The DDIST CI shall forward the Distribution Activity Log entries to the SMC.
IMS-1650#A	MS operations data shall contain information on: a. System utilization at the IMS b. Outstanding data distribution requests c. Outstanding processing requests d. Outstanding data acquisition requests		S-DMS-31040	A	The GTWAY CI shall log the termination or successful completion of service requests.
			S-DSS-00040	A	The SDSRV CI shall provide operations staff the capability to view queued Service Requests.
			S-DSS-30115	A	The DDIST CI shall provide the capability for operations staff to list Distribution Requests according to Request Identifier and status.
			S-DMS-31010	A	The GTWAY CI shall log to MSS the initiation of all Service requests.
IMS-1650#B	MS operations data shall contain information on: a. System utilization at the IMS b. Outstanding data distribution requests c. Outstanding processing requests d. Outstanding data acquisition requests		S-DMS-31040	A	The GTWAY CI shall log the termination or successful completion of service requests.
			S-DSS-00040	A	The SDSRV CI shall provide operations staff the capability to view queued Service Requests.
			S-DSS-30115	A	The DDIST CI shall provide the capability for operations staff to list Distribution Requests according to Request Identifier and status.
			S-DMS-01020	B	The LIMGR CI shall log the suspension of processing of Service requests.
			S-DMS-01030	B	The LIMGR CI shall log the resumption of previously suspended Service requests.
			S-DMS-01040	B	The LIMGR CI shall log the termination of service requests.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-11020	B	The DIMGR CI shall log the suspension of processing of Service requests.
			S-DMS-11030	B	The DIMGR CI shall log the resumption of previously suspended Service requests.
			S-DMS-11040	B	The DIMGR CI shall log the termination of service requests.
			S-DMS-31020	B	The GTWAY CI shall log the suspension of processing of Service requests.
			S-DMS-31030	B	The GTWAY CI shall log the resumption of previously suspended Service requests.
			S-DSS-00331	B	The SDSRV CI shall record the User Identifier of the science investigator associated with a Service Request, to be used for accounting purposes.
			S-DSS-01170	B	The SDSRV CI shall provide the capability to monitor resource utilization on a client basis.
			S-DSS-04745	B	The SDSRV CI shall provide operations staff with the ability to display and list outstanding DARs that are accessible by the Data Server.
			S-DMS-01010	B	The LIMGR CI shall log to MSS all Service requests initiated during a session.
			S-DMS-01011	B	The LIMGR CI shall log to MSS when a service request is activated from the queue.
			S-DMS-01012	B	The LIMGR CI shall log to MSS when a service request has been successfully decomposed into its component requests.
			S-DMS-01013	B	The LIMGR CI shall log to MSS when the component service request has been submitted to the external entity (e.g. GTWAY, SDSRV).
			S-DMS-01014	B	The LIMGR CI shall log to MSS when the request to the external entity (e.g. GTWAY, SDSRV) has been successfully returned.
			S-DMS-01015	B	The LIMGR CI shall log to MSS when the results of the external requests have been integrated and status is about to be sent to the client program.
			S-DMS-11010	B	The DIMGR CI shall log to MSS all Service requests initiated during a session.
			S-DMS-11012	B	The DIMGR CI shall log to MSS when a service request is activated from the queue.
			S-DMS-11013	B	The DIMGR CI shall log to MSS when a service request has been successfully decomposed into its component requests.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-11014	B	The DIMGR CI shall log to MSS when an external connection (i.e. to LIMGR, GTWAY or SDSRV) has been established.
			S-DMS-11015	B	The DIMGR CI shall log to MSS when the component service request has been submitted to the external entity (e.g. LIMGR, GTWAY, SDSRV).
			S-DMS-11016	B	The DIMGR CI shall log to MSS when the request to the external entity (e.g. LIMGR, GTWAY, SDSRV) has been successfully returned.
			S-DMS-11017	B	The DIMGR CI shall log to MSS when the results of the external requests have been integrated and status is about to be sent to the client program.
			S-DMS-31010	A	The GTWAY CI shall log to MSS the initiation of all Service requests.
			S-DMS-31013	B	The GTWAY CI shall log to MSS when a service request is activated from the queue.
			S-DMS-31014	B	The GTWAY CI shall log to MSS when a service request has been successfully decomposed into its component requests.
			S-DMS-31015	B	The GTWAY CI shall log to MSS when an external connection to the V0 IMS server has been established.
			S-DMS-31016	B	The GTWAY CI shall log to MSS when the component service request has been submitted to the V0 IMS server.
			S-DMS-31017	B	The GTWAY CI shall log to MSS when the request to the V0 IMS server has been successfully returned.
			S-DMS-31018	B	The GTWAY CI shall log to MSS when the results of the request has been integrated and status is about to be sent to the client program.
			S-DMS-20865	B	The DDICT CI shall log to MSS the initiation of all Service requests.
			S-DMS-20868	B	The DDICT CI shall log to MSS when a service request is activated from the queue.
			S-DMS-20869	B	The DDICT CI shall log to MSS when a request has been successfully completed and the status is about to be returned to the client.
			S-DMS-01016	B	The LIMGR CI shall log to MSS when an external connection (i.e. to GTWAY or SDSRV) has been established.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-1660#A	The IMS shall provide to the SMC a full and complete history of all IMS resources used by science investigators including, at a minimum: a. CPU utilization b. Amount of user storage c. Connect time d. Session histories		S-DSS-01190	A	The SDSRV CI shall provide the capability for operations staff to view the resources used and allocated by a client.
IMS-1660#B	The IMS shall provide to the SMC a full and complete history of all IMS resources used by science investigators including, at a minimum: a. CPU utilization b. Amount of user storage c. Connect time d. Session histories		S-DSS-01190	A	The SDSRV CI shall provide the capability for operations staff to view the resources used and allocated by a client.
			S-DMS-00915	B	The LIMGR CI shall log the initiation of a session.
			S-DMS-00920	B	The LIMGR CI shall log the termination of a session.
			S-DMS-00930	B	The LIMGR CI shall log the suspension of a session.
			S-DMS-00940	B	The LIMGR CI shall log the resumption of previously suspended sessions.
			S-DMS-01020	B	The LIMGR CI shall log the suspension of processing of Service requests.
			S-DMS-01030	B	The LIMGR CI shall log the resumption of previously suspended Service requests.
			S-DMS-01040	B	The LIMGR CI shall log the termination of service requests.
			S-DMS-10915	B	The DIMGR CI shall log the initiation of a session.
			S-DMS-10920	B	The DIMGR CI shall log the termination of a session.
			S-DMS-10930	B	The DIMGR CI shall log the suspension of a session.
			S-DMS-10940	B	The DIMGR CI shall log the resumption of previously suspended sessions.
			S-DMS-20260	B	The DDICT CI shall support an administration utility for performance monitoring of system disk, memory, CPU and Input/Output.
			S-DMS-20270	B	The DDICT CI shall support an administration utility for performance monitoring of Service Requests processing.
			S-DMS-30910	B	The GTWAY CI shall log the initiation of a session.
			S-DMS-30920	B	The GTWAY CI shall log the termination of a session.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-30930	B	The GTWAY CI shall log the suspension of a session.
			S-DMS-30940	B	The GTWAY CI shall log the resumption of previously suspended
			S-DSS-00332	B	The SDSRV CI shall record the amount of user storage associated with a science user, to be used for accounting purposes.
			S-DSS-00333	B	The SDSRV CI shall record the amount of connect time associated with a science user, to be used for accounting purposes.
			S-DSS-00375	B	The SDSRV CI shall associate User Accounting Information with client sessions.
			S-DSS-00376	B	The SDSRV CI shall provide User Accounting Information to the SMC.
			S-DSS-00770	B	The SDSRV CI shall utilize vendor supplied tools to analyze system CPU performance.
			S-DMS-00700	B	The LIMGR CI shall support the MSS in collecting Accounting Management Data by supplying resource utilization data.
			S-DMS-10550	B	The DIMGR CI shall support the MSS in collecting Accounting Management Data by supplying resource utilization data.
			S-DMS-20835	B	The DDICT CI shall support the MSS in collecting Accounting Management Data by supplying resource utilization data.
			S-DMS-31056	B	The GTWAY CI shall support the MSS in collecting Accounting Management Data by supplying resource utilization data.
			S-IOS-00516	B	The ADSRV CI shall support the MSS in collecting Accounting Management Data by supplying resource utilization data.
			S-DMS-01010	B	The LIMGR CI shall log to MSS all Service requests initiated during a session.
			S-DMS-01017	B	The LIMGR CI shall log the successful completion of each service request to MSS.
			S-DMS-01011	B	The LIMGR CI shall log to MSS when a service request is activated from the queue.
			S-DMS-01012	B	The LIMGR CI shall log to MSS when a service request has been successfully decomposed into its component requests.
			S-DMS-01013	B	The LIMGR CI shall log to MSS when the component service request has been submitted to the external entity (e.g. GTWAY, SDSRV).

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-01014	B	The LIMGR CI shall log to MSS when the request to the external entity (e.g. GTWAY, SDSRV) has been successfully returned.
			S-DMS-01015	B	The LIMGR CI shall log to MSS when the results of the external requests have been integrated and status is about to be sent to the client program.
			S-DMS-11011	B	The DIMGR CI shall log the successful completion of each service request to MSS.
			S-DMS-11012	B	The DIMGR CI shall log to MSS when a service request is activated from the queue.
			S-DMS-11013	B	The DIMGR CI shall log to MSS when a service request has been successfully decomposed into its component requests.
			S-DMS-11014	B	The DIMGR CI shall log to MSS when an external connection (i.e. to LIMGR, GTWAY or SDSRV) has been established.
			S-DMS-11015	B	The DIMGR CI shall log to MSS when the component service request has been submitted to the external entity (e.g. LIMGR, GTWAY, SDSRV).
			S-DMS-11016	B	The DIMGR CI shall log to MSS when the request to the external entity (e.g. LIMGR, GTWAY, SDSRV) has been successfully returned.
			S-DMS-31013	B	The GTWAY CI shall log to MSS when a service request is activated from the queue.
			S-DMS-31014	B	The GTWAY CI shall log to MSS when a service request has been successfully decomposed into its component requests.
			S-DMS-31015	B	The GTWAY CI shall log to MSS when an external connection to the V0 IMS server has been established.
			S-DMS-31016	B	The GTWAY CI shall log to MSS when the component service request has been submitted to the V0 IMS server.
			S-DMS-31017	B	The GTWAY CI shall log to MSS when the request to the V0 IMS server has been successfully returned.
			S-DMS-20865	B	The DDICT CI shall log to MSS the initiation of all Service requests.
			S-DMS-20868	B	The DDICT CI shall log to MSS when a service request is activated from the queue.
			S-DMS-20869	B	The DDICT CI shall log to MSS when a request has been successfully completed and the status is about to be returned to the client.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-20870	B	The DDICT CI shall log to MSS the initiation of a session.
			S-DMS-01016	B	The LIMGR CI shall log to MSS when an external connection (i.e. to GTWAY or SDSRV) has been established.
			S-DMS-20871	B	The DDICT CI shall log to MSS the suspension of a session.
			S-DMS-20872	B	The DDICT CI shall log to MSS the resumption of a previously suspended session.
			S-DMS-20873	B	The DDICT CI shall log to MSS the termination of a session.
IMS-1665#A	he IMS shall provide to the SMC, IMS services usage by each user (to include at a minimum user name, IMS service identification, date/time stamp, time expended, facilities used) for later reporting and determination of access patterns.		S-DMS-31040	A	The GTWAY CI shall log the termination or successful completion of service requests.
			S-DMS-31010	A	The GTWAY CI shall log to MSS the initiation of all Service requests.
IMS-1665#B	he IMS shall provide to the SMC, IMS services usage by each user (to include at a minimum user name, IMS service identification, date/time stamp, time expended, facilities used) for later reporting and determination of access patterns.		S-DMS-31040	A	The GTWAY CI shall log the termination or successful completion of service requests.
			S-DMS-11020	B	The DIMGR CI shall log the suspension of processing of Service requests.
			S-DMS-11030	B	The DIMGR CI shall log the resumption of previously suspended Service requests.
			S-DMS-11040	B	The DIMGR CI shall log the termination of service requests.
			S-DMS-31020	B	The GTWAY CI shall log the suspension of processing of Service requests.
			S-DMS-31030	B	The GTWAY CI shall log the resumption of previously suspended Service requests.
			S-DSS-00376	B	The SDSRV CI shall provide User Accounting Information to the SMC.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-11010	B	The DIMGR CI shall log to MSS all Service requests initiated during a session.
			S-DMS-31010	A	The GTWAY CI shall log to MSS the initiation of all Service requests.
IMS-1680#B	The IMS status monitoring function shall provide the capability to distribute reports on a periodic basis to a predefined list of report recipients.		S-DMS-00705	B	The LIMGR CI shall support operations staff in the creation of utilization reports, and the operations staff shall distribute them on a periodic basis to a predefined list of report recipients.
			S-DMS-10555	B	The DIMGR CI shall support operations staff in the creation of utilization reports, and the operations staff shall distribute them on a periodic basis to a predefined list of report recipients.
			S-DSS-00377	B	The SDSRV CI shall support operations staff in the creation of utilization reports, and operations staff shall distribute them on a periodic basis to a predefined list of report recipients.
			S-DMS-20795	B	The DDICT CI shall support operations staff in the creation of utilization reports, and the operations staff shall distribute them on a periodic basis to a predefined list of report recipients.
			S-DMS-32000	B	The GTWAY CI shall support operations staff in the creation of utilization reports, and the operations staff shall distribute them on a periodic basis to a predefined list of report recipients.
IMS-1690#B	The IMS status monitoring function shall provide the capability to disseminate reports on-line electronically and off-line on either paper or electronic media.		S-DMS-00706	B	The LIMGR CI shall provide operations staff the capability to distribute utilization reports electronically, in hard copy, or on electronic media.
			S-DMS-10556	B	The DIMGR CI shall provide operations staff with the capability to distribute DIMGR CI utilization reports electronically or in hard copy or on electronic media.
			S-DSS-00378	B	Operations staff shall be able to distribute SDSRV utilization reports electronically or in hard copy or on electronic media.
			S-DMS-20796	B	The DDICT CI shall provide operations staff with the capability to distribute DDICT CI utilization reports electronically or in hard copy or on electronic media.
			S-DMS-32001	B	The GTWAY CI shall provide operations staff with the capability to distribute GTWAY CI utilization reports electronically or in hard copy or on electronic media.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-1700#A	The IMS shall provide the capability to generate reports on: a. The backlog of data distribution requests b. The backlog of processing requests c. The backlog of data acquisition requests d. Data quality assessment e. Daily IMS operations summaries f. IMS performance summaries		S-DSS-30355	A	The DDIST CI shall provide the capability to generate reports on the distribution backlog.
			S-IOS-00520	A	The ADSRV CI shall provide operations staff with the capability to generate daily ADSRV operations summary reports.
			S-IOS-00530	A	The ADSRV CI shall provide operations staff with the capability to generate ADSRV performance summary reports.
IMS-1700#B	The IMS shall provide the capability to generate reports on: a. The backlog of data distribution requests b. The backlog of processing requests c. The backlog of data acquisition requests d. Data quality assessment e. Daily IMS operations summaries f. IMS performance summaries		S-DSS-30355	A	The DDIST CI shall provide the capability to generate reports on the distribution backlog.
			S-DSS-04745	B	The SDSRV CI shall provide operations staff with the ability to display and list outstanding DARs that are accessible by the Data Server.
			S-DMS-00605	B	The LIMGR CI shall provide operations staff with the capability to generate daily LIMGR operations summary reports.
			S-DMS-00606	B	The LIMGR CI shall provide operations staff with the capability to generate LIMGR performance summary reports.
			S-DMS-10385	B	The DIMGR CI shall provide operations staff with the capability to generate daily DIMGR operations summary reports.
			S-DMS-10386	B	The DIMGR CI shall provide operations staff with the capability to generate DIMGR performance summary reports.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-20355	B	The DDICT CI shall provide operations staff with the capability to generate daily DDICT operations summary reports.
			S-DMS-20356	B	The DDICT CI shall provide operations staff with the capability to generate DDICT performance summary reports.
			S-DMS-32010	B	The GTWAY CI shall provide operations staff with the capability to generate daily GTWAY operations summary reports.
			S-DMS-32011	B	The GTWAY CI shall provide operations staff with the capability to generate GTWAY performance summary reports.
			S-IOS-00520	A	The ADSRV CI shall provide operations staff with the capability to generate daily ADSRV operations summary reports.
			S-IOS-00530	A	The ADSRV CI shall provide operations staff with the capability to generate ADSRV performance summary reports.
IMS-1710#B	The IMS shall provide the capability to produce reports that correlate science data to associated: a. Calibration data b. Navigation data c. Instrument engineering data		S-DSS-04670	A	The SDSRV CI shall support Inventory searches based on the Core Inventory Metadata.
			S-DSS-03210	A	The SDSRV CI shall be capable of receiving Production History and its associated metadata.
IMS-1720#A	The IMS shall provide the capability to produce reports that relate data sets to: a. Processing algorithms used for data generation at the PGS b. Software used for data generation at the PGS c. Parameters used for data generation at the PGS d. Data recipients		S-DSS-30270	A	The DDIST CI shall log the following to the Distribution Activity Log, for each Media Distribution Request: User Identifier, Media Identifiers, Media Type/Form Factor, and the Distribution Size.
			S-DSS-30280	A	The DDIST CI shall log the following to the Distribution Activity Log, for each Electronic Distribution Request: User Identifier, Data Destination, and the Distribution Size.
			S-DSS-30288	A	The DDIST CI shall forward the Distribution Activity Log entries to the SMC.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-30290	A	The DDIST CI shall provide operations staff with the capability to display the Distribution Activity Log.
			S-DSS-30350	A	The DDIST CI shall provide the capability to generate reports on the distribution activity for a period specified by operations staff.
			S-DSS-04430	A	The SDSRV CI shall have the ability to store references to Science Software Archive Packages as Metadata for science data.
			S-DSS-04450	A	The SDSRV CI shall have the ability to store references to Production History data as Metadata for science data.
			S-DSS-04440	A	The SDSRV CI shall have the ability to store references to data generation software as Metadata for science data.
IMS-1720#B	The IMS shall provide the capability to produce reports that relate data sets to: a. Processing algorithms used for data generation at the PGS b. Software used for data generation at the PGS c. Parameters used for data generation at the PGS d. Data recipients		S-DSS-30270	A	The DDIST CI shall log the following to the Distribution Activity Log, for each Media Distribution Request: User Identifier, Media Identifiers, Media Type/Form Factor, and the Distribution Size.
			S-DSS-30280	A	The DDIST CI shall log the following to the Distribution Activity Log, for each Electronic Distribution Request: User Identifier, Data Destination, and the Distribution Size.
			S-DSS-30288	A	The DDIST CI shall forward the Distribution Activity Log entries to the SMC.
			S-DSS-30290	A	The DDIST CI shall provide operations staff with the capability to display the Distribution Activity Log.
			S-DSS-30350	A	The DDIST CI shall provide the capability to generate reports on the distribution activity for a period specified by operations staff.
			S-DSS-04430	A	The SDSRV CI shall have the ability to store references to Science Software Archive Packages as Metadata for science data.
			S-DSS-04450	A	The SDSRV CI shall have the ability to store references to Production History data as Metadata for science data.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-04440	A	The SDSRV CI shall have the ability to store references to data generation software as Metadata for science data.
IMS-1730#A	The IMS shall provide the capability to produce reports that trace the data product back to the source instrument. \\871\\		S-DSS-04690	A	The SDSRV CI shall support Inventory searches based on a combination of the Core Inventory Metadata and Product Specific Metadata.
IMS-1730#B	The IMS shall provide the capability to produce reports that trace the data product back to the source instrument. \\871\\		S-DSS-04690	A	The SDSRV CI shall support Inventory searches based on a combination of the Core Inventory Metadata and Product Specific Metadata.
IMS-1740#A	The IMS shall produce cross reference reports (by user and data set) of processing performed, data sets produced, supporting data used, and data recipient.		S-DSS-04690	A	The SDSRV CI shall support Inventory searches based on a combination of the Core Inventory Metadata and Product Specific Metadata.
			S-DSS-30290	A	The DDIST CI shall provide operations staff with the capability to display the Distribution Activity Log.
IMS-1740#B	The IMS shall produce cross reference reports (by user and data set) of processing performed, data sets produced, supporting data used, and data recipient.		S-DSS-04690	A	The SDSRV CI shall support Inventory searches based on a combination of the Core Inventory Metadata and Product Specific Metadata.
			S-DSS-30290	A	The DDIST CI shall provide operations staff with the capability to display the Distribution Activity Log.
IMS-1760#A	The IMS shall send detected hardware faults to the SMC, to include at a minimum: a. IMS processors b. IMS network interfaces c. Storage devices		C-MSS-60390	A	The MSS Fault Management Application Service at the sites shall, for faults detected within its site, isolate, locate, and identify faults to the level of: a. subsystem b. equipment c. software
			C-MSS-60380	IR1	The MSS Fault Management Application Service at the sites shall isolate, locate, and identify faults, identify subsystem, equipment and software faults, and identify the nature of the faults detected within its site.
IMS-1760#B	The IMS shall send detected hardware faults to the SMC, to include at a minimum: a. IMS processors b. IMS network interfaces c. Storage devices		C-MSS-60390	A	The MSS Fault Management Application Service at the sites shall, for faults detected within its site, isolate, locate, and identify faults to the level of: a. subsystem b. equipment c. software

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-36215	B	The Management Agent Service shall have the capability to receive event notification from the CLS.
			C-MSS-36310	B	The Management Agent Service shall have the capability to receive detected hardware and software fault information from the IOS.
			C-MSS-36360	B	The Management Agent Service shall have the capability to receive detected hardware and software fault information from the DMS.
			C-MSS-36410	B	The Management Agent Service shall have the capability to receive detected hardware and software fault information from the PLS.
			C-MSS-36460	B	The Management Agent Service shall have the capability to receive detected hardware and software fault information from the DPS.
			C-MSS-36510	B	The Management Agent Service shall have the capability to receive detected hardware and software fault information from the INS.
			C-MSS-36560	B	The Management Agent Service shall have the capability to receive detected hardware and software fault information from the DSS.
			C-MSS-36710	B	The Management Agent Service shall have the capability to receive detected hardware and software fault information from the CSS.
			S-DSS-00830	B	The SDSRV CI shall collect Fault Management Data, such as, device failures, Service Request failures, transmission failures and general failures. This information shall be sent to the SMC for fault isolation.
			S-DMS-20820	B	The DDICT CI shall provide detected hardware and software fault information to MSS.
			S-DMS-00520	B	The LIMGR CI shall send detected hardware and software fault information to MSS.
			S-DMS-10530	B	The DIMGR CI shall send detected hardware and software fault information to MSS.
			S-DMS-31051	B	The GTWAY CI shall send detected hardware and software fault information to MSS.
			S-IOS-00490	A	The ADSRV CI shall send detected hardware and software fault information to MSS.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-1765#A	<p>The IMS shall be developed with configuration-controlled application programming interfaces (APIs) that will be capable of supporting development of the following extensions to the ECS IMS by the DAACs, ECS and other users:</p> <ul style="list-style-type: none"> a. Addition of metadata fields that are unique to the data maintained at a specific DAAC b. Addition of documents for use as guide metadata for DAAC-specific data products c. Development of DAAC-specific data acquisition request utilities d. Support of data visualization utilities for DAAC-specific products e. Support of DAAC-specific data analysis utilities f. Development of DAAC-unique metadata search and access services that will operate independent of the delivered ECS IMS services g. Development of a local user interface that can bypass the delivered ECS user interface for accessing DAAC-unique metadata search and access services 		S-CLS-13000	A	The WKBCH CI application program interfaces shall be configuration controlled.
			S-IOS-00800	A	The ADSRV CI shall provide an application program interface for the submission of Service Requests.
			S-IOS-00810	A	The ADSRV CI shall provide an application program interface for the submission of requests for administrative services.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-1765#B	<p>The IMS shall be developed with configuration-controlled application programming interfaces (APIs) that will be capable of supporting development of the following extensions to the ECS IMS by the DAACs, ECS and other users:</p> <ul style="list-style-type: none"> a. Addition of metadata fields that are unique to the data maintained at a specific DAAC b. Addition of documents for use as guide metadata for DAAC-specific data products c. Development of DAAC-specific data acquisition request utilities d. Support of data visualization utilities for DAAC-specific products e. Support of DAAC-specific data analysis utilities f. Development of DAAC-unique metadata search and access services that will operate independent of the delivered ECS IMS services g. Development of a local user interface that can bypass the delivered ECS user interface for accessing DAAC-unique metadata search and access services 		S-CLS-13010	B	The WKBCH CI shall provide application program interfaces that will support development of extensions for support of data visualization utilities for DAAC-specific products.
			S-CLS-13040	B	The WKBCH CI shall provide application program interfaces that will support development of a local user interface client accessing DAAC-unique Metadata searching services.
			S-CLS-13050	B	The WKBCH CI shall provide application program interfaces that will be capable of supporting the development of a local user interface that can bypass the delivered ECS user interface for accessing DAAC-unique Metadata searching services.
			S-CLS-15870	B	The WKBCH CI shall provide applications program interfaces to provide support of DAAC specific data analysis utilities.
			S-CLS-15880	B	The WKBCH CI shall provide applications program interfaces to support development of DAAC unique metadata search and access services that will operate independent of the delivered ECS services.
			S-DMS-00900	B	The LIMGR CI shall provide an application program interface for the submission of Service Requests.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-00910	B	The LIMGR CI shall provide an application program interface for the submission of requests for administrative services.
			S-DMS-10900	B	The DIMGR CI shall provide an application program interface for the submission of Service Requests.
			S-DMS-10910	B	The DIMGR CI shall provide an application program interface for the submission of requests for administrative services.
			S-DSS-01450	B	The SDSRV CI shall provide application programming interfaces capable of supporting the development of extensions for the addition of Metadata fields that are unique to the data maintained at a specific DAAC.
			S-DSS-10230	B	The DDSRV CI shall provide application programming interfaces that support addition of documents for use as Guide data for DAAC-specific Data Products.
			S-DSS-10260	B	The DDSRV CI shall provide application programming interfaces that support development of extensions for addition of documents for use as Guide data for DAAC-specific Data Products.
			S-CLS-13000	A	The WKBCH CI application program interfaces shall be configuration controlled.
			S-IOS-00800	A	The ADSRV CI shall provide an application program interface for the submission of Service Requests.
			S-IOS-00810	A	The ADSRV CI shall provide an application program interface for the submission of requests for administrative services.
IMS-1780#B	The IMS shall respond to each user session operation within the time period specified in Table 7-4 with the specified rate of IMS operations.		S-IOS-00340	A	The ADSRV CI shall perform a single keyword attribute directory search in not exceeding 2 seconds.
			S-DMS-00480	B	The LIMGR CI shall contribute to supporting the response time defined in Appendix E (Section E.7, Table E-8) of the current version of 304-CD-005, for a single instrument inventory search consisting of multiple keyword attributes with time range check.
			S-DMS-00490	B	The LIMGR CI shall contribute to supporting the response time defined in Appendix E (Section E.7, Table E-8) of the current version of 304-CD-005, for a multiple instrument inventory search consisting of multiple keyword attributes with time range check.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DMS-00500	B	The LIMGR CI shall contribute to supporting the response time defined in Appendix E (Section E.7, Table E-8) of the current version of 304-CD-005, in accepting from Data Servers a single instrument inventory result set consisting of multiple keyword attributes with special range check, integrating the results, and providing a complete result set.
			S-DMS-00510	B	The LIMGR CI shall contribute to supporting the response time defined in Appendix E (Section E.7, Table E-8) of the current version of 304-CD-005, in accepting from Data Servers a multiple instrument inventory result set consisting of multiple keyword attributes with time range check, integrating the results, and providing a complete result set.
			S-DMS-10470	B	The DIMGR CI shall contribute to supporting the response time defined in Appendix E (Section E.7, Table E-8) of the current version of 304-CD-005, in accepting processing, and distributing to the LIMs multiple DAAC, single instrument inventory search consisting of multiple keyword attributes with special range check.
			S-DMS-10480	B	The DIMGR CI shall contribute to supporting the response time defined in Appendix E (Section E.7, Table E-8) of the current version of 304-CD-005, in accepting, processing, and distributing to LIMs a multiple DAAC, multiple instrument inventory search consisting of multiple keyword attributes with time range check.
			S-DMS-10490	B	The DIMGR CI shall contribute to supporting the response time defined in Appendix E (Section E.7, Table E-8) of the current version of 304-CD-005, in accepting from LIMs a multiple DAAC, single instrument Inventory result set consisting of multiple keyword attributes with spacial range check , integrate the results, and providing a complete result set.
			S-DMS-10500	B	The DIMGR CI shall contribute to supporting the response time defined in Appendix E (Section E.7, Table E-8) of the current version of 304-CD-005, in accepting from LIMs multiple DAAC, multiple instrument Inventory result set consisting of multiple keyword attributes with time range check , integrate the results, and providing a complete result set.
			S-DSS-10300	B	The Document Data Server shall complete a search for a guide document by a single keyword in not exceeding 8 seconds.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-DSS-10305	B	The Document Data Server shall complete a directory search using a single keyword in a period not to exceed 8 seconds.
			S-DSS-10306	B	The Document Data Server shall complete a directory search using multiple keywords in a period not to exceed 13 seconds.
			S-DSS-10310	B	The Document Data Server shall complete a keyword search on a 1000 page document of not exceeding 3 seconds.
IMS-1785#B	The IMS performance specified in Table 7-4 shall be maintained during other IMS operational activities such as database updates from the DADS.		S-DMS-60300	A	The DMGHW CI shall be configured to support the SDPS function of information searches on the ECS directory's availability requirement of .993 and a mean down time (MDT) requirement of < 2 hours during times of staffed operations.
			S-DMS-00480	B	The LIMGR CI shall contribute to supporting the response time defined in Appendix E (Section E.7, Table E-8) of the current version of 304-CD-005, for a single instrument inventory search consisting of multiple keyword attributes with time range check.
IMS-1790#A	The IMS shall provide, based upon the data model defined in Appendix C, sufficient storage for, at a minimum: a. Directory metadata b. Guide (documentation/reference material) metadata c. Inventory metadata d. System space, LSM data, and data base system overhead e. Metadata staging area f. Spacecraft housekeeping and ancillary data metadata g. Science processing library software metadata h. Summary data statistics i. User workspace		S-DSS-21730	A	The DRPHW CI shall be sized to permanently store and maintain the total number of bytes of product data derived from Appendix E (Section E.1) of the current version of 304-CD-002 for Release A and the current version of 304-CD-005 for Release B.
			S-DSS-21740	A	The DRPHW CI shall be sized to permanently store and maintain the total number of bytes of record based data derived from Appendix E (Section E.1) of the current version of 304-CD-002 for Release A and the current version of 304-CD-005 for Release B.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-1790#B	The IMS shall provide, based upon the data model defined in Appendix C, sufficient storage for, at a minimum: a. Directory metadata b. Guide (documentation/reference material) metadata c. Inventory metadata d. System space, LSM data, and data base system overhead e. Metadata staging area f. Spacecraft housekeeping and ancillary data metadata g. Science processing library software metadata h. Summary data statistics i. User workspace		S-DMS-60200	B	The DMGHW CI shall provide local storage as defined in Appendix E (Section E.8, Table E-9) of the current version of 304-CD-005.
			S-DSS-21730	A	The DRPHW CI shall be sized to permanently store and maintain the total number of bytes of product data derived from Appendix E (Section E.1) of the current version of 304-CD-002 for Release A and the current version of 304-CD-005 for Release B.
			S-DSS-21740	A	The DRPHW CI shall be sized to permanently store and maintain the total number of bytes of record based data derived from Appendix E (Section E.1) of the current version of 304-CD-002 for Release A and the current version of 304-CD-005 for Release B.
IMS-1800#A	The IMS design and implementation shall have the flexibility to accommodate 100% expansion in processing and storage capacity without major changes to the IMS hardware and software design. This expansion capacity shall apply to the total at-launch requirement plus the yearly product growth requirement specified in Appendix C.		S-DSS-21770	A	The DRPHW CI shall be capable of providing of 200 percent expansion in capacity without architecture or design change.

IMS RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
IMS-1800#B	The IMS design and implementation shall have the flexibility to accommodate 100% expansion in processing and storage capacity without major changes to the IMS hardware and software design. This expansion capacity shall apply to the total at-launch requirement plus the yearly product growth requirement specified in Appendix C.		S-DSS-21770	A	The DRPHW CI shall be capable of providing of 200 percent expansion in capacity without architecture or design change.